

CITY AND COUNTY OF SAN FRANCISCO
DEPARTMENT OF CITY PLANNING

DOCUMENTS DEPT.

FEB 10 1986

SAN FRANCISCO
PUBLIC LIBRARY

DRAFT ENVIRONMENTAL IMPACT REPORT

**STONESTOWN SHOPPING CENTER
RENOVATION AND EXPANSION**

83.98E

DEIR PUBLICATION DATE:	February 7, 1986
DEIR PUBLIC HEARING DATE:	March 13, 1986
DEIR PUBLIC COMMENT PERIOD:	February 7 through March 24, 1986

WRITTEN COMMENTS SHOULD BE SENT
TO THE ENVIRONMENTAL REVIEW OFFICER
450 McALLISTER ST., 6th FLOOR
SAN FRANCISCO, CA 94102

0
REF
711.5522
St72505



5/S

SAN FRANCISCO
PUBLIC LIBRARY

REFERENCE
BOOK

Not to be taken from the Library



SAN FRANCISCO PUBLIC LIBRARY



3 1223 03565 2214

DATE: February 7, 1986

TO: Distribution List for the Stonestown Shopping Center Draft EIR

FROM: Barbara Sahm, Environmental Review Officer

RE: Request for the Final Environmental Impact Report for Stonestown Shopping Center

This is a Draft of the Environmental Impact Report for Stonestown Shopping Center. A public hearing will be held on the adequacy and accuracy of this document on March 13, 1986. After the public hearing, our office will prepare and publish a document titled "Summary of Comments and Responses" which will contain a summary of all relevant comments on this Draft EIR and our responses to those comments. It may also specify changes to this Draft EIR. Those who testify at the hearing on the Draft will automatically receive a copy of the Comments and Responses document along with the notice of the date reserved for certification (in this case, probably about six to eight weeks after the hearing on the Draft); others may receive such copies and notice on request or by visiting our office. This Draft EIR together with the Summary of Comments and Responses document will be considered by the City Planning Commission in an advertised public meeting and certified as a Final EIR, if deemed adequate.

After certification, we will modify the Draft EIR as specified by the Comments and Responses document and print both documents in a single publication called the Final Environmental Impact Report. The Final EIR will add no new information to the combination of the two documents except to reproduce the certification resolution. It will simply provide the information in one rather than two documents. Therefore, if you receive a copy of the Comments and Responses document in addition to this copy of the Draft EIR, you will technically have a copy of the Final EIR.

We are aware that many people who receive the Draft EIR and Summary of Comments and Responses have no interest in receiving virtually the same information after the EIR has been certified. To avoid expending money and paper needlessly, we would like to send copies of the Final EIR to private individuals only if they request them.

If you want a copy of the Final EIR, please so indicate in the space provided on the next page and mail the request to the Office of Environmental Review within two weeks after certification of the EIR. Any private party not requesting a Final EIR by that time will not be mailed a copy. Public agencies on the distribution list will automatically receive a copy of the Final EIR. Copies will also be available at the Department of City Planning, 450 McAllister Street, Fifth Floor, San Francisco, California, 94102.

Thank you for your interest in this project.

D REF 711.5522 St72505

Stonestown Shopping
Center renovation and
1986.

S.F. PUBLIC LIBRARY

3 1223 03565 2214

*Place
Postage
Here*

Department of City Planning
Office of Environmental Review
450 McAllister Street, 6th Floor
San Francisco, CA 94102

Attention: Carol Roos, EIR Coordinator
83.98E - Stonestown Shopping Center

Cut Along Dotted Line

**RETURN REQUEST REQUIRED FOR FINAL ENVIRONMENTAL
IMPACT REPORT**

Request for Final Environmental Impact Report

To: Department of City Planning
Office of Environmental Review

Please send me a copy of the Final EIR.

Signed: _____

Print your name and address below:

Cut Along Dotted Line

DRAFT ENVIRONMENTAL IMPACT REPORT

**STONESTOWN SHOPPING CENTER
RENOVATION AND EXPANSION**

83.98E

DEIR PUBLICATION DATE:	February 7, 1986
DEIR PUBLIC HEARING DATE:	March 13, 1986
DEIR PUBLIC COMMENT PERIOD:	February 7 through March 24, 1986

WRITTEN COMMENTS SHOULD BE SENT
TO THE ENVIRONMENTAL REVIEW OFFICER
450 McALLISTER ST., 6th FLOOR
SAN FRANCISCO, CA 94102



Digitized by the Internet Archive
in 2014

<https://archive.org/details/stonestownshoppi7198sanf>

TABLE OF CONTENTS

TABLE OF CONTENTS

	<u>Page</u>
I. SUMMARY	1
II. PROJECT DESCRIPTION	15
A. Project Sponsor's Objectives	15
B. Project Location	15
C. Project Characteristics	18
D. Project Schedule, Cost, and Required Approvals	31
III. ENVIRONMENTAL SETTING	35
A. Land Use and Zoning	35
B. Urban Design and Visual Quality	43
C. Shadow and Wind	50
D. Transportation, Circulation, and Parking	51
E. Air Quality	57
F. Employment and Housing	58
IV. ENVIRONMENTAL IMPACTS	60
A. Issues Not Addressed	60
B. Land Use and Zoning	60
C. Urban Design and Visual Quality	62
D. Shadow and Wind	62
E. Transportation, Circulation, and Parking	73
F. Air Quality	103
G. Energy	105
H. Employment and Housing	110
I. Noise	111
J. Cultural Resources	115
V. MITIGATION MEASURES THAT WOULD MINIMIZE THE POTENTIAL IMPACTS OF THE PROJECT	117
VI. SIGNIFICANT ENVIRONMENTAL EFFECTS THAT CANNOT BE AVOIDED IF THE PROJECT IS IMPLEMENTED	124
VII. ALTERNATIVES TO THE PROPOSED PROJECT	125
A. Alternative One: No Project	125
B. Alternative Two: Department Store at the East Side of the Site	126
C. Alternative Three: Parking Garage at the East Side of the Site	127
D. Alternative Four: No New Department Store or Garage	130
E. Alternative Five: No Major Transportation Improvements	131
VIII. EIR AUTHORS AND CONSULTANTS; ORGANIZATIONS AND PERSONS CONSULTED	133

TABLE OF CONTENTS

	<u>Page</u>
IX. DISTRIBUTION LIST	136
X. APPENDICES	
A. Final Initial Study	A-3-
B. Project Description	A-30
C. Transportation	A-33
D. Air Quality	A-44
E. Noise	A-46

LIST OF FIGURES

1. Project Location	16
2. Project Site	17
3. Site Plan	21
4. Basement Level Plan	22
5. Ground Level Plan	23
6. Second Level Plan	24
7. East Elevation	25
8. West Elevation	26
9. Existing Land Use	36
10. Use Districts	40
11. Height and Bulk Districts	41
12. Project Area Photo Locations	44
13. View From Nineteenth Avenue Looking Southwest	45
14. View From Existing Garage Looking East at Bridge over Winston Drive	46
15. View From Existing Garage Looking Northeast	47
16. View From Northwest Corner of Site Looking Southeast	48
17. View From Northwest Corner of Site Looking South	49
18. Photomontage -- View of Project from Nineteenth Avenue Looking Southwest	65
19. Photomontage -- View of Project from Existing Garage Looking Northeast	66
20. Photomontage -- View of Project from Northwest Corner of Site Looking Southeast	67
21. Proposed Enclosed Mall	68
22. Shadow Patterns: December 21	69
23. Shadow Patterns: June 21	70
24. Shadow Patterns: March/September 21	71
25. Existing Transit Service	84
26. Proposed Location of Bus Stops	87
27. Modifications to Vehicular Access	96
28. Electricity Consumption	108
29. Natural Gas Consumption	109
 C-1 Directions of Approach and Departure	 A-37
E-1 Noise Measurement Locations	A-52

LIST OF TABLES

1. Project Characteristics	19
2. Muni Frequency of Service	53

TABLE OF CONTENTS

	<u>Page</u>
3. Summary of Air Quality in San Francisco, 1982-1984	58
4. Relationship Between Applicable Urban Design Policies of the Comprehensive Plan and the Proposed Project	63
5. Projected Outbound Travel Demand By Mode From Stonestown Shopping Center Expansion Project	76
6. Summary of Level of Service	79
7. Traffic Signal Warrant Analysis for Unsignalized Intersections	82
8. P.M. Peak Hour Transit Seat Capacity Analysis	86
9. Stonestown Parking Supply	90
10. Estimated Parking Supply Requirements	93
11. Off-Street Loading Supply	100
12. Estimated Service Vehicle Movements	101
13. Off-Street Loading Space Requirements	102
14. Curbside Carbon Monoxide Concentrations Under Worst-Case Conditions	104
15. Regional Automobile Emissions	104
16. Estimated Project Energy Use	107
17. Maximum Estimated Construction Noise Levels	114
 B-1 Existing and Proposed Building Areas	 A-30
B-2 Parking Summary	A-31
B-3 Employment	A-32
 C-2 Parking Occupancy of 35 Unmarked Spaces on Northbound Nineteenth Avenue Between Winston and Eucalyptus Drives	 A-39
C-3 Planning Code Parking Requirements	A-43

I. SUMMARY

I. SUMMARY

A. PROJECT DESCRIPTION

The Stoneson Development Corporation proposes to expand and renovate the Stonestown Shopping Center, located at Nineteenth Avenue and Winston Drive in southwestern San Francisco. The project architect is Field/Gruzen, San Francisco. The property is in a C-2 (Community Business) District and is located in Assessor's Blocks 7295 (Lot 19) and 7296 (Lots 5 through 9).

The project would include construction of a 54-foot tall, three-story department store (basement, first floor, mezzanine, and second floor), containing approximately 148,000 gross square feet, west of the existing mall. A new parking garage would be constructed west of the existing mall to the north of the proposed department store; it would have four levels (all above grade), with 260 spaces per level, for 1,040 total spaces. About 217,300 square feet of existing mall buildings would be torn down and replaced with 177,380 square feet of mall level and 140,422 square feet of second level retail space (317,802 square feet total). The open air pedestrian mall would be enclosed and would include a skylight. The existing second level pedestrian bridge over Winston Drive would be expanded at its present level, and the mall would be extended across Winston Drive under the bridge. The bridge would include retail shops (25,178 square feet) and pedestrian circulation (8,666 square feet). About 13,700 square feet of existing office space plus retail sales and storage areas would be eliminated with demolition of the mall buildings.

The existing mall basement would be converted from retail, storage, and loading use to parking for 350 cars. A ramp from the eastern parking lot would be built to the new basement garage. This garage also would be connected to the western parking lot at grade via a driveway which would be built to serve the new, 1,040-space parking structure.

A new entrance would be built from Nineteenth Avenue, midway between Winston and Eucalyptus Drives, and would connect with a new access road within the site. A traffic signal (enabling Muni Metro vehicles to override the signal) would be installed at the intersection created by the new entrance. A left-turn pocket would be constructed east of the Muni right-of-way within the Nineteenth Avenue median. Within the site, the new access road would become the east leg of the Twentieth Avenue-Buckingham Way intersection, and this intersection would be realigned. Twentieth Avenue between Winston Drive and Buckingham Way would be realigned to the east, within the existing

parking lot. Winston Drive would be excavated under the existing second level pedestrian bridge in order to extend the pedestrian mall across Winston Drive with vehicles passing under. A service tunnel under Winston Drive would be demolished with reconstruction of the roadway, and the grade crosswalk on Winston Drive would be eliminated. Winston Drive would be closed to traffic during its reconstruction. The eastern of two Winston Drive entrances to the existing parking garage would be closed, and entrances to the existing western parking lots would be closed or relocated. The project also would relocate Muni stops within the site.

One hundred ninety-four (194) existing surface parking spaces would be eliminated by construction of the new department store. Two hundred twenty (220) new surface parking spaces would be created by restriping existing parking areas. The 350 new basement parking spaces, 780 net new spaces in the proposed garage, and 220 spaces added by restriping would result in a net increase of 1,156 parking spaces. With another 132 on-street spaces within the site which would remain unchanged, there would be a total of 4,470 on-site spaces. About 35 unmarked, curbside spaces on the east side of Nineteenth Avenue would be removed with construction of the proposed entrance and associated left-turn pocket.

There would be a total of 40 truck loading spaces (20 new spaces and 20 existing spaces retained by the project), 30 of which would be for large trucks and ten for vans. Sixty-four (64) loading spaces in the mall basement (of the 84 total existing loading spaces) would be eliminated with this area's conversion to parking.

Altogether, the project would add about 233,668 square feet of net new retail space to the approximately 792,000 square feet of existing retail space (for a total retail area of 1,025,170 square feet) and another 330,666 square feet in the garage for 848,273 square feet of new construction. There would be a net increase of 1,156 on-site parking spaces and a net loss of 44 loading spaces.

B. ENVIRONMENTAL SETTING

The project would renovate and expand Stonestown Shopping Center, a regional shopping center which, at the same time, serves the residential communities of southwest San Francisco.

C. MAIN ENVIRONMENTAL EFFECTS

1. Land Use and Zoning

The project would maintain the existing retail commercial, and related parking, land uses at Stonestown and intensify these uses on the site. About 13,700 square feet of office, 232,134 square feet of retail sales and storage, and 97,140 square feet of warehouse area would be eliminated. The project would comply with the zoning, height, and floor area ratio requirements of the Planning Code. While the project would be within the 65-foot height limit, an exception to the bulk limitations would be required for the portions of the proposed department store and skylight mall enclosure which would exceed 40 feet in height (page 61). A Conditional Use Permit would be required for these exceptions.

2. Urban Design and Visual Quality

The proposed project would respond to some policies of the Urban Design Element of the Master Plan. The project is intended to unify the appearance of the Stonestown Shopping Center and would provide increased weather protection and pedestrian scale and interest in the enclosed mall (page 63). Stonestown would continue to be larger in scale than surrounding development.

3. Shadow and Wind

The project would not shade any properties under the jurisdiction of the Recreation and Park Commission (covered by Proposition K, the Park Shadow Ban Initiative) and would not cast any shadows on area outside the site. The proposed department store and garage would cast new shadows on about ten percent of the surrounding parking areas in winter, and the second mall story would increase the area shaded on the eastern parking lots in afternoon hours. The project would cast a shadow on one proposed bus stop, west of the new department store on Winston drive; no new shadow would be cast on bus stops beyond that now cast by Stonestown buildings. The existing open mall would be enclosed, reducing sunlight. The enclosed mall would include a skylight (page 62 and pages 69-72).

Changes in wind currents over the site would be negligible because of the low-rise nature of the project. Wind within the mall would be eliminated due to its enclosure (pages 72-73).

4. Transportation, Circulation, and Parking

The project would generate approximately 300 new outbound P.M. peak hour vehicle trips on an Average Day and 360 new outbound P.M. peak hour trips on a Design Day (see page 76).

In order to test future conditions, project traffic impacts were added to projected 1995 conditions (which include expected cumulative development in the study area and assume full occupancy of existing vacant Stonestown facilities).

Additional trips from the project itself would not change levels of service (LOS) at the signalized intersections of surrounding streets over estimated year 1995 conditions. With cumulative increases from other development in the area and full occupancy of the existing Stonestown center (without the project), Average Day levels of service would be expected to decline by 1995 at the Nineteenth Avenue-Winston Drive (LOS "C" to "D"), Lake Merced Boulevard-Winston Drive (LOS "B" to "C"), and Nineteenth Avenue-Eucalyptus Drive (LOS "D" to "E") intersections. Project-generated traffic would not change projected 1995 levels of service (page 79).

For the signalized intersections, level of service "E" would occur on an Average Day at Nineteenth Avenue-Eucalyptus Drive (page 80). Average Day level of service "D" would occur at Nineteenth Avenue-Winston Drive, and Average Day level of service "C" would occur at Lake Merced Boulevard-Winston Drive. All of these levels of service would remain unchanged as a result of the addition of project-generated traffic. On a Design Day, the level of service at Nineteenth Avenue-Eucalyptus Drive would remain "E" while Nineteenth Avenue-Winston Drive and Lake Merced-Winston Drive would decline one level of service (to LOS "E" and "D", respectively)(see Table 6, page 79). These levels of service would remain unchanged as a result of the project.

The level of service at the unsignalized intersection of Buckingham Way-Winston Drive would decline by 1995 from Average Day LOS "B" to "C" assuming full occupancy of existing facilities and cumulative development in the area (without the project). This level of service would decline further (LOS "D") with the project. The level of service of the unsignalized Twentieth Avenue-Winston Drive intersection would decline on an Average Day from "A" to "B" with the project, if the proposed entrance and access road on Nineteenth Avenue were not built (the LOS would remain "A" with the

access road). The Twentieth Avenue-Buckingham Way intersection would decline from Average Day LOS "A" to "B" with construction of the proposed entrance on Nineteenth Avenue (LOS "A" with the project but without the entrance and access road)(page 81). The Twentieth Avenue-Eucalyptus Drive unsignalized intersection would decline from Average Day level of service "A" to "B" as a result of future traffic growth without the project. The addition of project traffic would result in an Average Day LOS "C" at this location. Design Day conditions would result in one level of service poorer operation for each intersection under both future (1995) and future (1995) with the project scenarios.

The proposed new entrance (and access road) on Nineteenth Avenue between Winston Drive and Eucalyptus Drive would provide additional left-turn capacity from northbound Nineteenth Avenue into the site (page 80).

Access and internal circulation for Stonestown would be redesigned as part of the project. Changes would include the new entrance, traffic signal, and additional left-turn lane from Nineteenth Avenue; new access road within the site; realignment of Twentieth Avenue to the east (away from the existing mall buildings); a ramp connecting the east side parking area to the west side parking area via the mall basement parking area; and the lowering of Winston Drive (which would eliminate the existing grade pedestrian crossing at the south end of the mall and replace it with a mall level crossing under the existing pedestrian bridge)(pages 95-99).

A net increase of 1,156 parking spaces would be provided in: (1) a new parking structure (780 net new spaces, 1,040 total spaces) on the west side, (2) the mall basement to be converted from loading and warehousing to parking (350 spaces), and (3) restriping of present surface parking areas (220 spaces) (page 88). Some parking would be eliminated on the west side due to construction of the new department store (194 spaces lost permanently); the parking structure would replace 260 surface spaces with 1,040 spaces (for 780 net new spaces). Approximately 40% of the new parking spaces would be for compact cars.

Pedestrian volumes would increase with the project. The major increase would occur between the new parking facilities and the stores. Pedestrian levels of service would not change from existing level of service "A", free flowing conditions. Pedestrian-automobile conflicts which occur on Winston Drive at the mid-block crosswalk at the south end of the mall would be eliminated because pedestrians would cross Winston Drive using the mall extension over Winston Drive with vehicles passing underneath (page 95).

Transit ridership would increase by approximately 160 P.M. peak hour trips (110 trips with full occupancy of existing space and 50 trips due to the project itself). Estimated available seating capacity during the P.M. peak hour ranges from six percent (M Line southbound) to 91% (Route 18 southbound). Transit ridership due to cumulative development at Stonestown and in the surrounding area (including full occupancy of existing Stonestown facilities and the project) would not change transit levels of service in the Stonestown area (page 85).

The project would provide 40 off-street loading spaces, 19 more than the 21 spaces required by the City Planning Commission Resolution 9286. Twenty (20) new loading spaces would be provided, and 20 existing loading spaces would be retained (30 would be for large trucks and ten for vans)(page 100). Sixty-four (64) existing basement loading spaces would be removed by converting these basement loading spaces and warehouse areas to customer parking. Service vehicle trips would increase from about 259 existing to 300 daily trips with the project (16% more trips than under existing conditions), 50% of which would be small vehicles (panel or pickup trucks or station wagons). The peak delivery time would be around midday, and 15 to 20 vehicles would be expected during a peak hour -- a volume which could be accommodated by the 40 loading spaces proposed (page 100).

Construction of the proposed entrance (including left-turn lane) from Nineteenth Avenue would require closing the northbound lane nearest to the median for about two months and closing two southbound lanes (the parking lane and lane nearest the curb) for five months. These lane closures would affect auto traffic on Nineteenth Avenue; they would not affect Muni Metro M Line operations. The proposed lowering of Winston Drive would require closure of that street between Twentieth Avenue and Buckingham Way for about five months. During this time, pedestrian and vehicular traffic (including Muni bus Routes 17, 18, and 29 and SAMTRANS Route 3B) would need to be rerouted. This would increase traffic volumes on Twentieth Avenue and Buckingham Way and also would increase traffic delay. Reconstruction of the Twentieth Avenue-Buckingham Way intersection would cause delays to traffic using this intersection. About 25 construction vehicle and 150 construction worker vehicle trips would be generated per day. Street and lane closures would affect Muni bus operations as well as other traffic (pages 73-74).

5. Air Quality

The project would act as an indirect source of atmospheric emissions by generating automobile traffic. However, neither the State one-hour standard

nor the Federal eight-hour standard for carbon monoxide would be exceeded with or without the proposed project. No measurable impact on regional air quality would be expected due to the statistically insignificant quantities of pollutants which would be generated by the project in comparison with regional totals (pages 103-104).

6. Energy

The project (existing and new area) would have an estimated annual source energy consumption of 67 billion Btu per year. Added peak electricity demand of commercial space for the project would be about 1,580 kilowatts (kW)(page 107).

7. Employment and Housing

The project would displace eight existing office tenants which employ about 45 workers. No office development is proposed as part of the project. Expansion of Stonestown's retail area would create an estimated 680 new retail jobs for a total of about 2,170 permanent on-site jobs (page 111).

8. Noise

Project construction would increase noise levels in the project area temporarily. The noisiest activity associated with this construction would be the use of asphalt paving machines for reconstruction of Winston Drive. Noise levels of 89 dBA would be heard outside the apartments nearest this construction work (74 dBA inside with windows open and 69 dBA with windows closed). Impact wrenches used for the erection of the steel frame of the proposed department store would generate maximum sound levels of 85 dBA outside these apartment buildings (70 dBA inside with windows open and 65 dBA with windows closed). The resulting levels inside the apartment buildings would be high enough to be annoying and distracting during those periods when asphalt paving machines and impact wrenches would be used (page 115).

9. Cultural Resources

While artifacts were found in the greater project vicinity in 1970, a pretesting program conducted for the project, consisting of auger borings

made by an archaeologist, showed no evidence of potential artifacts on the site (page 116).

D. MITIGATION MEASURES

Major measures identified which would mitigate potentially significant environmental effects include the following:

1. Transportation, Circulation, and Parking

Measures proposed as part of the project:

- The proposed lowering of Winston Drive would eliminate pedestrian-vehicle conflicts at the crossing at the south end of the mall.
- The proposed lowering of Winston Drive would have a grade of less than eight percent to facilitate circulation and safety.
- During the construction period, construction would be restricted to 7:30 A.M. to 5:00 P.M. to reduce peak-hour traffic conflicts. The project sponsor and construction contractor would meet with Caltrans, the Traffic Engineering Division of the Bureau of Engineering of the Department of Public Works, the Fire Department, Muni, and the Department of City Planning to determine feasible traffic mitigation measures to reduce traffic congestion during construction of the project. To minimize cumulative traffic impacts due to street and lane closures during construction, the project sponsor would coordinate with construction contractors for any concurrent nearby projects which are planned for construction or later become known.
- The project sponsor would be responsible for implementing a construction contract which assured that the construction of the new access point would not disrupt the operation of the Muni M-Line. A temporary traffic signal or flagperson would be provided to permit safe movements of construction vehicles and through traffic.
- Within one year after occupancy, additional traffic analysis would be done at the Winston Drive-Buckingham Way intersection. If the intersection is operating at level of service "D" or below, the project sponsor would carry out appropriate mitigation such that LOS "C" is maintained. This could include installation of traffic signals as

described on page 83.

Mitigation measures not included in the proposed project:

- A traffic signal at the Twentieth Avenue-Winston Drive intersection would improve traffic circulation there, although the location does not meet signal warrants. This traffic signal must be coordinated with the existing signal at the Nineteenth Avenue-Winston Drive intersection. More than half of the cost of installing this traffic signal would be borne by the project sponsor. Implementation would be the responsibility of the Department of Public Works.
- Design of the entrance/exit near the Buckingham Way-Winston Drive intersection from the proposed parking structure to accommodate right turns only in and out, would minimize turning movement conflicts. The project developer would have the responsibility for this design and is considering this measure.
- Replacement of existing non-standard STOP signs with standard STOP signs within Stonestown could improve safety and circulation. The project sponsor would have the responsibility for these replacements and is considering this measure.
- To encourage transit use, bus shelters could be provided at bus stops serving Stonestown. The design and placement of these shelters must be approved by Muni and would be the responsibility of the project sponsor. The sponsor is considering this measure.

2. Air Quality

Measures proposed as part of the project:

- The access and internal circulation measures described in the transportation mitigation measures (see above) would partially offset congestion generated by the project, which, in turn, would reduce vehicle idling time and emissions. Because vehicle emission rates decrease as vehicle speed increases, these measures also would be air quality mitigation measures.
- The project sponsor would require the general contractor to sprinkle demolition sites with water continually during demolition activity; sprinkle unpaved construction areas with water at least twice a day;

cover stockpiles of soil, sand, and other such material; cover trucks hauling debris, soil, sand, or other such material; and sweep streets surrounding demolition and construction sites at least twice a day to reduce TSP emissions. (Two wettings per day with complete coverage would reduce particulate emissions -- dust -- by about 50%.) The project sponsor would require the general contractor to maintain and operate construction equipment to minimize exhaust emissions, by such means as a prohibition on idling motors when equipment is not in use or when trucks are waiting in queues, and implementation of specific maintenance programs for equipment which would be used during construction.

3. Energy

Measures proposed as part of the project:

- The project would be designed to be more energy-efficient than required by Title 24 of the California Administrative Code in order to reduce energy consumption.
- A variable air-volume ventilation system, equipped with an economizer cycle (to use 100% outside air when it reaches the appropriate temperature) would be used to reduce energy consumption for air conditioning.
- The project would adhere to the guidelines of the (now withdrawn) Federal Energy Building Temperature Restrictions in the operations of heating, ventilating, and air conditioning (HVAC) equipment, which would reduce energy consumption.
- The multi-level garage lights would be controlled by light sensors, which would operate these lights on an as-needed basis.
- A carbon monoxide monitoring system would control garage ventilation to avoid unnecessary operation of fans.
- The enclosed mall would be naturally ventilated.

4. Noise

Measures proposed as part of the project:

- The construction contract would require the project contractor to muffle and shield intakes and exhaust, shroud or shield impact tools, and use electric-powered rather than diesel-powered construction equipment, as feasible, so that noise would not exceed limits stated in the City's Noise Ordinance (Article 29, San Francisco Administrative Code, 1972).
- The general contractor would construct barriers around stationary equipment, such as compressors, to reduce noise and/or locate equipment in pits or excavated areas to serve as noise barriers.
- Truck access to the construction site would be via the existing parking lot to avoid truck traffic at the existing apartment buildings, church, or school.
- Concrete pump trucks and other stationary equipment would be located as far as possible from the existing buildings to increase occupants' distance from these noise sources.
- To minimize construction impacts, construction would be restricted to the hours of 7:30 A.M. to 5:00 P.M., a time when some people would be expected to be away from home.

5. Cultural Resources

Measures proposed as part of the project

- Should cultural or historic artifacts be found during project excavation, a qualified archaeologist, retained by the project sponsor, would assess the significance of the find and immediately report to the Environmental Review Officer and the President of the Landmarks Preservation Advisory Board (LPAB). The archaeologist, as well as the Landmarks Preservation Advisory Board, would advise the Environmental Review Officer who then would recommend specific mitigation measures, if necessary. Excavation or construction activities which might damage the discovered cultural resources would be suspended for a maximum of four weeks (cumulatively for all instances following the commencement of excavation that the Environmental Review Officer has required a delay in excavation or construction activities) to permit inspection, recommendations, and retrieval, if appropriate. Following site clearance, an appropriate security program would be implemented to

prevent looting. Any discovered cultural artifacts assessed as significant by the archaeologist upon concurrence by the Environmental Review Officer and the President of the LPAB would be placed in a repository designated for such materials. Copies of the reports prepared according to this mitigation measure will be sent to the California Archaeological Site Survey at Sonoma State University.

6. Geology and Topography

Measures proposed as part of the project:

- A detailed geotechnical report would be prepared by a California-licensed engineer for the project sponsor. The project sponsor and contractor would follow the recommendations made in that report regarding project excavation and construction.

7. Hazards

Measures proposed as part of the project:

- An evacuation and emergency response plan would be developed by the project sponsor or building management staff, in consultation with the Mayor's Office of Emergency Services, to ensure coordination between the City's emergency planning activities and the project's plan and to provide for building occupants in the event of an emergency. The project plan would be reviewed by the Office of Emergency Services and implemented by building management insofar as feasible before issuance by the Department of Public Works of final building permits.
- To expedite implementation of the City's emergency response plan, the project sponsor would post information for building occupants concerning what to do in the event of a disaster.

E. ALTERNATIVES TO THE PROPOSED PROJECT

1. No Project

This alternative would retain Stonestown Shopping Center as it is, and no environmental impacts associated with the proposed project would occur. The project sponsor has rejected this alternative because, in his opinion, it

would perpetuate an inefficient and wasteful use of the project site (pages 125-126).

2. Department Store on the East Side of the Site

Under this alternative the proposed department store would be located east of the existing shopping mall, instead of on the west as proposed. All other features of the proposed project would be the same. Due to the sharply sloping site (the west side of the site is more than one floor, or about 16 feet, lower than the east side), a new department store located at the eastern side of the project would appear higher from the surrounding neighborhood. Locating the department store as proposed with the project at the western portion of the site would reduce the apparent height of the new department store as seen from Nineteenth Avenue, compared with this alternative. Locating the proposed department store at the eastern side of the site would increase its proximity to transit routes along Nineteenth and Twentieth Avenues. The sponsor has rejected this alternative due to public opposition when major new buildings were proposed for this eastern portion of the site in 1977 (pages 126-127).

3. Parking Garage at the East Side of the Site

This alternative would locate the proposed parking garage on the east side of the existing mall, rather than on the west as proposed. All other characteristics of the proposed project would be the same.

As described for the department store on the east under Alternative Two, above, the visual prominence of the proposed parking garage in the eastern parking area would be greater from Nineteenth Avenue with this alternative than with the project. This alternative was rejected by the project sponsor because it would not provide direct access to the proposed new department store and because prior public opposition was expressed to the construction of major new buildings in this area of the site (pages 128-130).

4. No New Department Store or Garage

Under this alternative, development would consist of enclosing the existing outdoor mall and adding a new second floor retail area above the existing mall shops. Some additional parking would be provided through restriping of surface parking lots. No new parking garage or major new department store would be built. This alternative would add approximately 369,607 square

feet of gross floor area to Stonestown Shopping Center.

Absence of the 148,000-square-foot department store from the development would result in fewer vehicle trips in and out of the site compared with the project and, thereby, would reduce air pollution, noise, and energy consumption correspondingly. This alternative would result in approximately 320 fewer permanent retail jobs than with the project.

This alternative was rejected by the project sponsor, because, in his opinion, the third department store for Stonestown proposed in the project would be necessary to provide the competitive mix required for a viable regional shopping center. In his opinion, without this department store and its supporting parking garage, current uneconomic and inefficient use of the project site would continue (pages 130-131).

5. No Major Transportation Improvements

Under this alternative, development would proceed as with the proposed project but without its major transportation modifications: no new entrance would be built from Nineteenth Avenue, Twentieth Avenue would not be realigned, and Winston Drive would not be depressed. Without the second access to the site from Nineteenth Avenue, the levels of service at Winston Drive's intersections with Nineteenth and Twentieth Avenues would be LOS "D" and "B", respectively. There would be no alteration of Nineteenth Avenue (left-turn pocket, relocation of traffic lanes eastward, eliminating curbside parking). Access to the mall basement parking would be less direct. Vehicle-pedestrian conflicts would continue and could increase at the grade crossing of Winston Drive. The sponsor has rejected this alternative due to concerns about the safety of pedestrians crossing Winston Drive and Twentieth Avenue, on-site traffic circulation and distribution, and parking accessibility along Twentieth Avenue (pages 131-132).

II. PROJECT DESCRIPTION

A. PROJECT SPONSOR'S OBJECTIVES

The project sponsor, the Stoneson Development Corporation, proposes to renovate and expand the Stonestown Shopping Center to: (1) restore Stonestown to the level of retail excellence it once provided, (2) provide the competitive mix necessary in regional shopping centers of this type, and (3) increase shopper convenience and amenities. Other objectives of the sponsor include a reasonable rate of return on investment through the lease of this commercial space and improvement of circulation, parking, and truck service. The architects for the project are Field/Gruzen Associated Architects, San Francisco.

B. PROJECT LOCATION

The proposed project would be constructed on the 45.25-acre existing Stonestown Shopping Center site at Nineteenth Avenue and Winston Drive in the southwestern area of San Francisco (see Figures 1 and 2, pages 16 and 17). The project site includes Assessor's Blocks 7295 (Lot 19) and 7296 (Lots 5 through 9) and is bounded by Nineteenth Avenue on the east, Eucalyptus Drive on the north, and Buckingham Way on the south and west. As of 1985, Stonestown Shopping Center consists of 1,259,854 square feet of gross floor area (see Table 1, page 19). The project would alter, remodel, and expand the existing shopping center which now consists of facilities for two major department stores, a retail mall with mezzanine offices, basement retail, loading, and storage areas, and parking in a garage and surface lots. Other buildings within the shopping center (which would not be affected by the proposed project) include Petrini's market, the former Joseph Magnin building, the five-story Stonestown Medical-Dental building, and ancillary buildings (the owner's administrative offices, a movie theater, savings and loan, and a gas station).

The site is in a C-2 (Community Business) district in which the maximum allowable floor area ratio (FAR) is 3.6:1. (An FAR of 3.6:1 means that a gross floor area of up to 3.6 times the area of the site could be built.) The height and bulk district is 65-D in which the maximum allowable height is 65 feet. Above 40 feet, the maximum allowable building length is 110 feet, and the maximum allowable diagonal dimension is 140 feet.

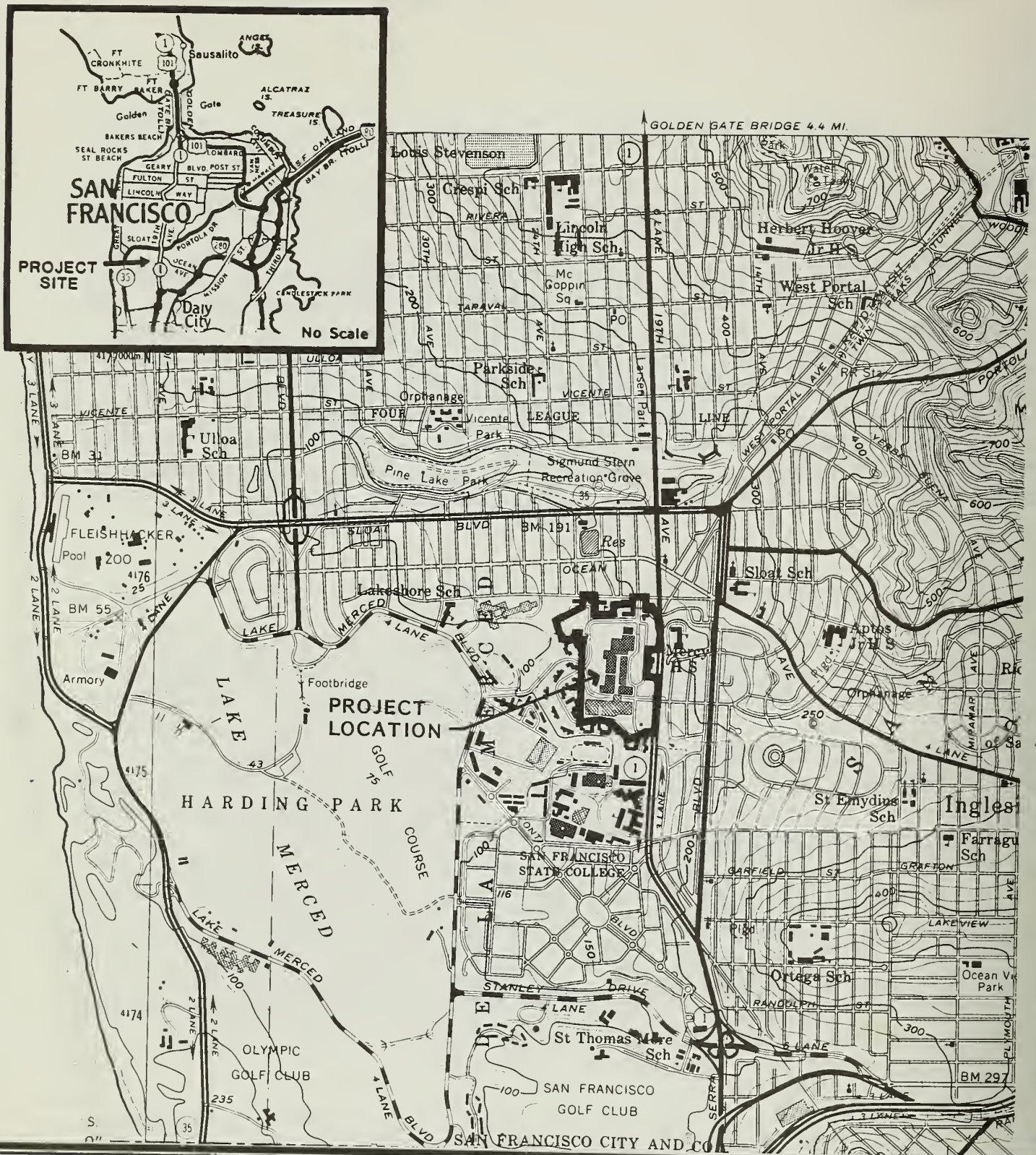


Figure 1. PROJECT LOCATION



STONESTOWN SHOPPING CENTER
RENOVATION AND EXPANSION

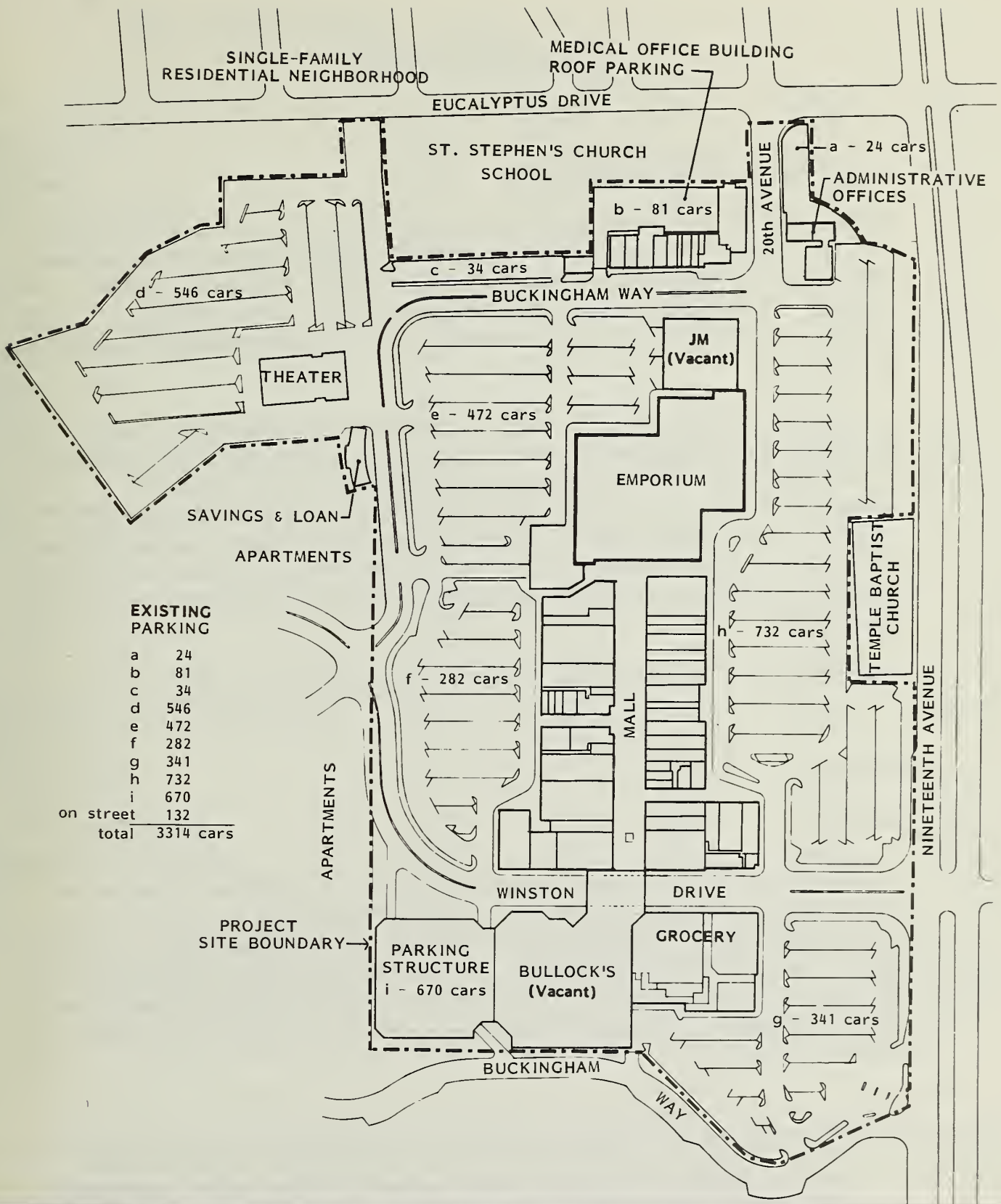


Figure 2. PROJECT SITE



STONESTOWN SHOPPING CENTER
RENOVATION AND EXPANSION

0 100 200 300 Ft.

II. PROJECT DESCRIPTION

C. PROJECT CHARACTERISTICS

Project characteristics are summarized in Table 1, pages 19 and 20. (The EIR text uses gross floor area. Appendix B, page A-30 summarizes existing conditions in gross floor area, gross occupied area, and gross leasable area. ¹) The project layout, including its relation to the existing complex, is shown in plans and elevations in Figures 3 through 8, pages 21 through 26.

The proposed project would involve the demolition of existing mall area commercial and office space, construction of new commercial area (including a new department store), enclosure of the pedestrian mall and mall buildings, and changes in circulation and parking facilities (including construction of a new garage). The proposed project would add 697,189 net square feet to the existing complex for a 1,957,043-square foot shopping center, increasing development (all uses) on the site by 697,189 square feet (about 55%). ²

The components of the proposed project are described below.

Demolition

Mall Area

Approximately 217,265 square feet of existing area in mall buildings would be demolished, including 56,553 square feet of mezzanine level office (13,703 square feet), retail, and storage area (42,850 square feet), 159,932 square feet of mall level retail area, and 780 square feet in the basement. (Another 8,580 square feet of retail area in a health club in the basement would be retained, although all other basement area would be converted to a 350-car garage.)

¹ Gross floor area (GFA), as defined by the City Planning Code, Section 102.8, is used to determine floor area ratio (FAR). Gross occupied area, as defined by the City Planning Code, Section 102.9, is used to determine off-street parking requirements. Gross leasable area (GLA), not defined by the City Planning Code, is used to determine traffic generation for commercial uses. Gross leasable area is defined according to real estate agreements. GLA equals GFA plus areas which under the Planning Code may be exempted from gross floor area.

² Area on completion of the proposed project (1,957,043 square feet) less existing area (1,259,854 square feet) equals the net increase (697,189 square feet).

TABLE 1
PROJECT CHARACTERISTICS
(square feet of gross floor area) ^{a/}

Project Components	Existing ^{b/}	Proposed Demolition	New Construction	Completed Project	Net Change
<u>Mall Buildings</u>					
• Basement	126,490 ^{c/}	780	1,072	169,618 ^{d/}	+43,128
• Mall Level	159,932	159,932	177,380	177,380	+17,448
• Mezzanine/Second Level					
-- Retail/Storage	42,850	42,850	140,422	140,422	+97,572
-- Offices	13,703	13,703	0	0	-13,703
• Pedestrian Circulation					
-- Mall Level	0	0	21,000	44,345 ^{e/}	+44,345
-- Mezzanine/Second Level	7,595	0	29,733	37,328	+29,733
<u>Mall Buildings' Subtotal</u>	<u>350,570</u>	<u>217,265</u>	<u>369,607</u>	<u>569,093</u>	<u>+218,523</u>
<u>Department Stores</u>					
• Emporium	280,257	0	0	280,257	0
• Bullock's (vacant)	146,195	0	0	146,195	0
• Proposed Store	-	-	148,000	148,000	+148,000
<u>Department Store Subtotal</u>	<u>426,452</u>	<u>0</u>	<u>148,000</u>	<u>574,452</u>	<u>+148,000</u>
<u>Other Buildings</u>					
• Joseph Magnin's (vacant)	34,354	0	0	34,354	0
• Grocery Market Building	77,212	0	0	77,212	0
• Standard Oil	1,164	0	0	1,164	0
• Grand Auto	3,502	0	0	3,502	0
• Imperial Savings and Loan	3,783	0	0	3,783	0
• Theater	12,901	0	0	12,901	0
• Administrative Building	14,436	0	0	14,436	0
• Medical Building	108,256	0	0	108,256	0
<u>Other Buildings' Subtotal</u>	<u>255,608</u>	<u>0</u>	<u>0</u>	<u>255,608</u>	<u>0</u>
<u>Total Commercial and Pedestrian Circulation Square Footage</u>	<u>1,032,630</u>	<u>217,265</u>	<u>517,607</u>	<u>1,399,153</u>	<u>+366,523</u>
<u>Parking Garages</u>					
• Existing Garage	227,224	0	0	227,224	0
• Proposed Garage	-	-	330,666	330,666	+330,666
<u>Parking Garage Subtotal</u>	<u>227,224</u>	<u>0</u>	<u>330,666</u>	<u>557,890</u>	<u>+330,666</u>
<u>TOTAL ON-SITE DEVELOPMENT</u>	<u>1,259,854</u>	<u>217,265</u>	<u>848,273</u>	<u>1,957,043</u>	<u>+697,189</u>

Source: Stoneson Development Corporation, Field/Gruzen, November 5, 1985, and Nichols • Berman, December 30, 1985.

^{a/} See Appendix A, page A-30, for a comparison of Gross Floor Area, Occupied Area, and Gross Leasable Area, existing and proposed. Retail space shown above is used both for retail sales and storage area. Retail space only is accessible from within mall level shops. Not all of these mezzanine retail areas are occupied (all office space is occupied). Vacant mezzanine space cannot be defined as retail sales or storage area which is why these uses are not broken down separately in the square footages given above. The gross floor area devoted to office use (13,703 square feet) was estimated by using the known amount (14,127 square feet) of gross leasable area. The differences in area definitions and in information available for the site at this time make it difficult to be precise about mezzanine areas. The transportation analysis in Chapter IV uses this estimated 13,703-square foot area to calculate trip generation (gross floor area is the basis of determining trip generation for offices while gross leasable area is used for commercial space).

^{b/} Of existing space, 225,775 square feet are vacant: Bullock's (146,195), Joseph Magnin's (34,354), and mall shops (45,226).

^{c/} Existing basement area includes 97,138 square feet of warehouse space and 29,352 square feet of retail and loading space. Except for a 8,580-square foot health club which would remain, this basement would be converted to a 350-space garage.

^{d/} This number does not add across due to the way the basement area is counted for FAR purposes under existing and proposed conditions.

^{e/} The difference between the proposed project (44,345 square feet) and new construction (21,000 square feet) represents 23,345 square feet of existing retail area to be converted to pedestrian circulation with the proposed project.

-- CONTINUED --

TABLE 1
PROJECT CHARACTERISTICS — CONTINUED

Parking ^{f/} (number of spaces)	Existing	To Be Eliminated		Completed Project ^{g/}	Net Change
• Lots	2,512	194		2,628	+116
• Garages	670	0		1,710	+1,040
• Street	132	0		132	0
Total Parking	3,314	194		4,470	+1,156

Loading	Existing	To Be Eliminated	New	Completed Project	Net Change
• Large Trucks	84	64	10	30	-54
• Vans	0	0	10	10	+10
Total Loading	84	64	20	40	-44

Employment ^{h/}	Existing (with vacancies)	Full Occupancy	To Be Eliminated	Estimated New Jobs	Completed Project ^{i/}	Net Change
• Retail	901	1,243	0	680 ^{l/}	1,923	+680
• Office	298	298	71	0	227	-71
• Service	18	18	0	0	18	0
Total Employment	1,217	1,559	71	680	2,168	+609

Maximum Dimensions of New Construction (in feet)	Building Height	Building Length	Diagonal Dimension
• Department Store	54	232	305
• Mall Building ^{k/}	38	626	784
• Mall Enclosure	56 ^{l/}	705	720
• Parking Garage	39	426	483

Source: Stoneson Development Corporation, Field/Gruzen, and William Liskamm

^{f/} See Appendix A, page A-31, for a breakdown of existing and proposed parking by lot, garage, and street spaces.

^{g/} Includes restriping.

^{h/} See Appendix A, page A-32, for sources and assumptions for existing and estimated employment.

^{i/} Full occupancy of existing and proposed development assumed.

^{j/} Based on 305,870 square feet of gross floor area (157,870 square feet of first and second level retail area in the mall and 248,000 square feet in the proposed department store) and uses the average of one employee per 450 square feet. Economic Practices Manual, A Handbook for Preparing Economic Impact Assessment, Office of Planning and Research, State of California, 1978, page 37 (average of one employee per 300 to 600 square feet).

^{k/} Average existing building height is 28 feet; 38 feet is the maximum height proposed for mall buildings.

^{l/} Total building height with 18-foot skylight atop 38-foot mall (19-foot mall level, 19-foot second level, and 18-foot skylight enclosure).

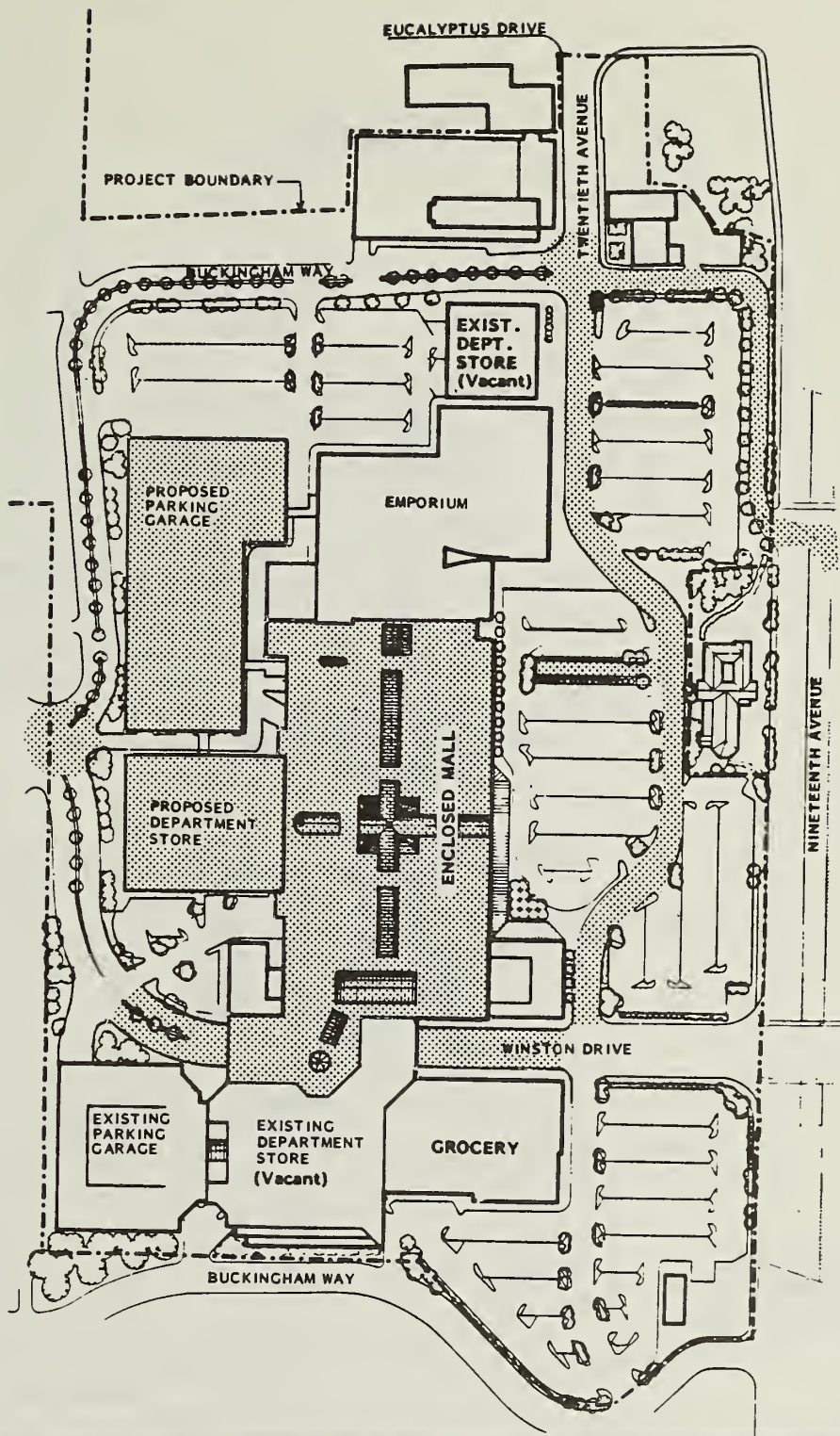


Figure 3. SITE PLAN - PROPOSED STONESTOWN DEVELOPMENT

 PROPOSED PROJECT



STONESTOWN SHOPPING CENTER
RENOVATION AND EXPANSION

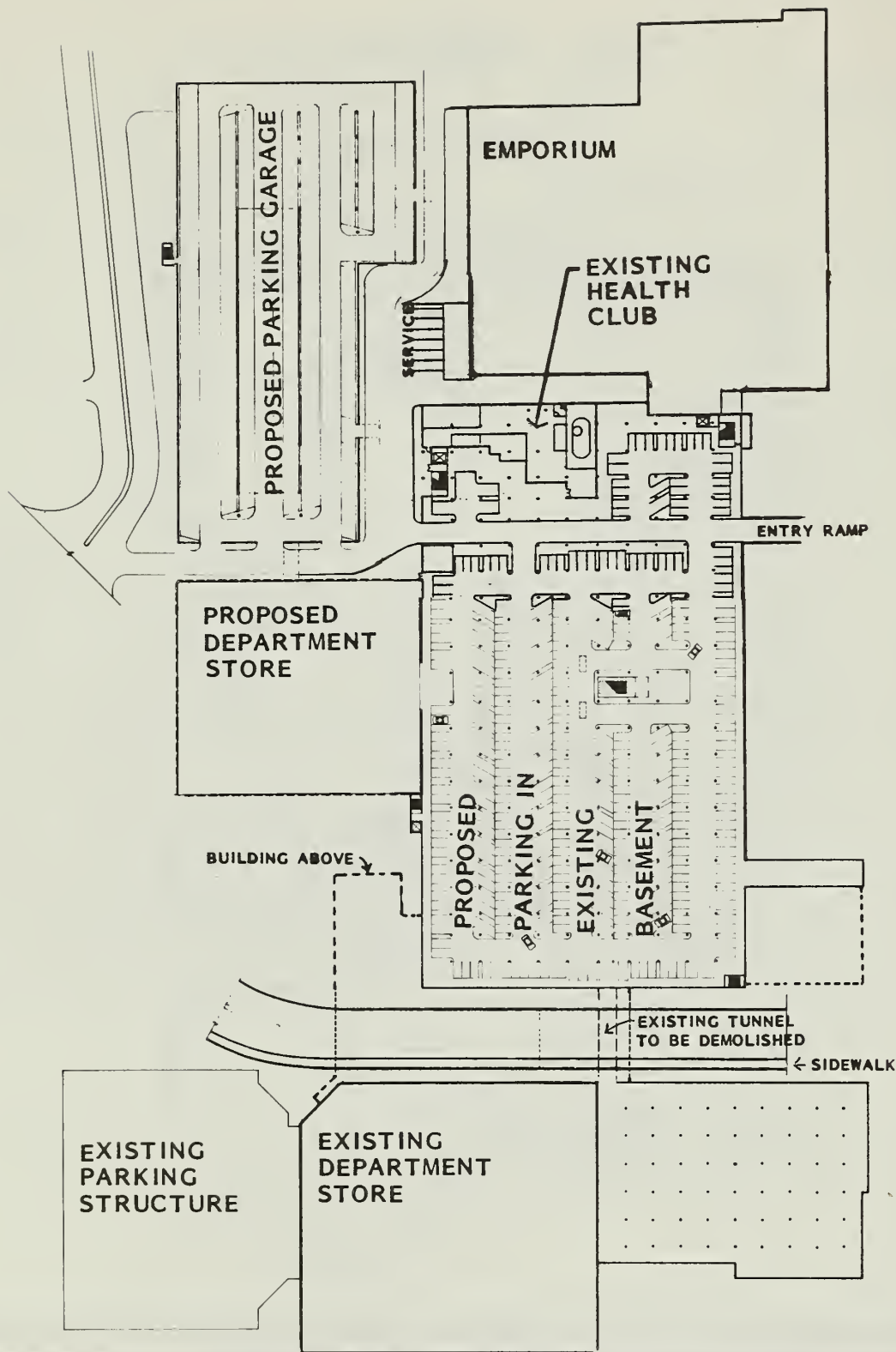


Figure 4. BASEMENT LEVEL PLAN



STONESTOWN SHOPPING CENTER
RENOVATION AND EXPANSION

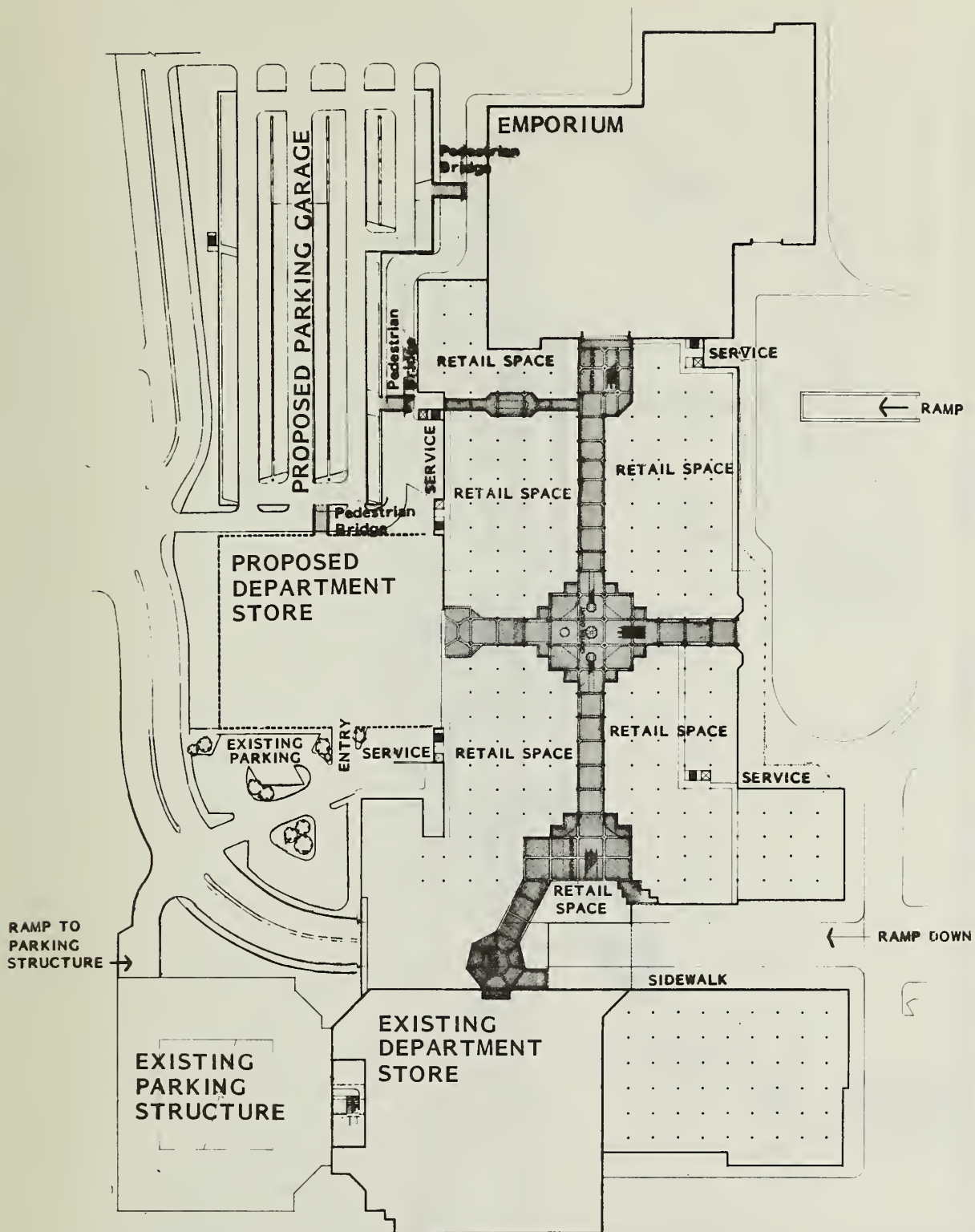


Figure 5. MALL LEVEL PLAN

PEDESTRIAN AREAS



STONESTOWN SHOPPING CENTER
RENOVATION AND EXPANSION

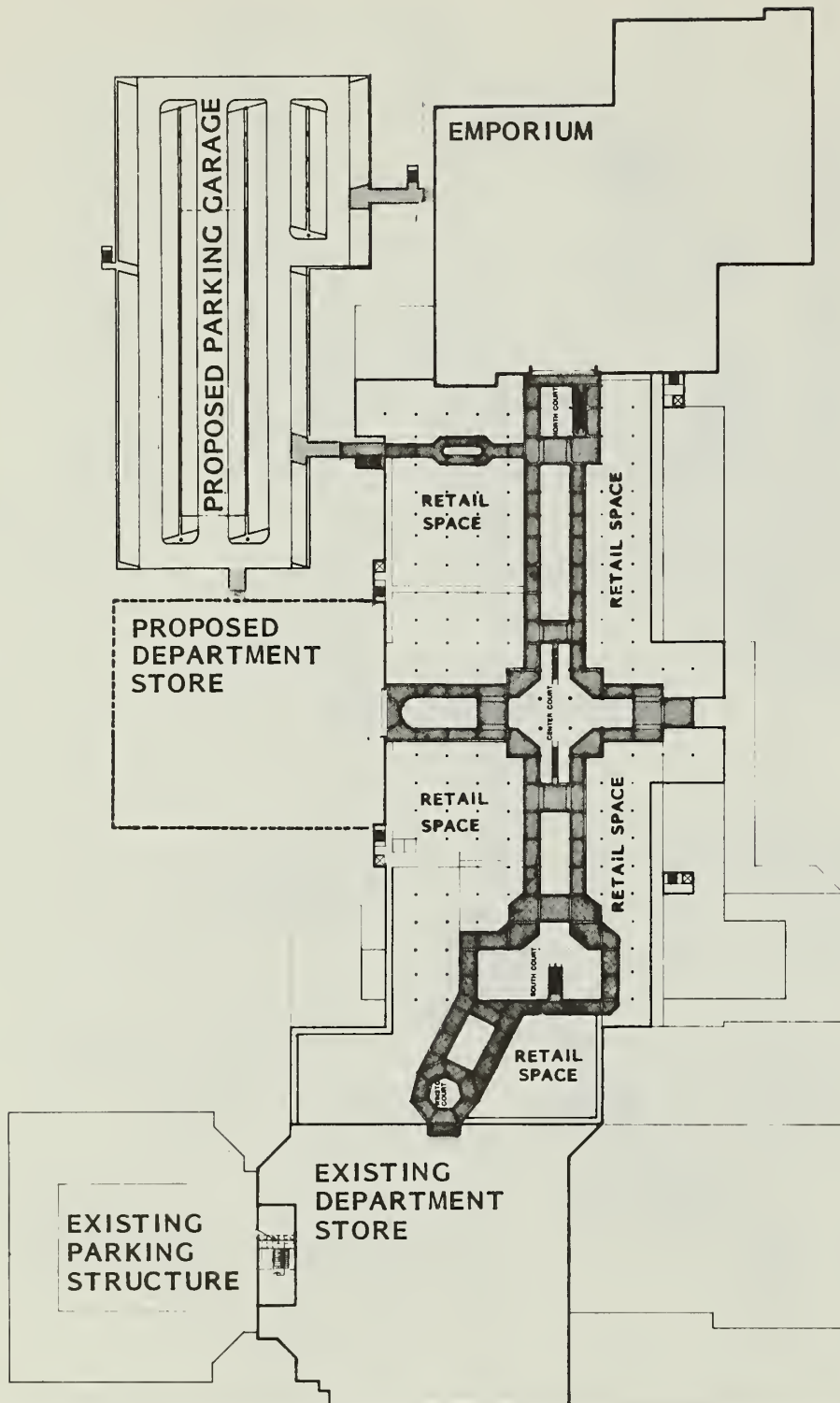
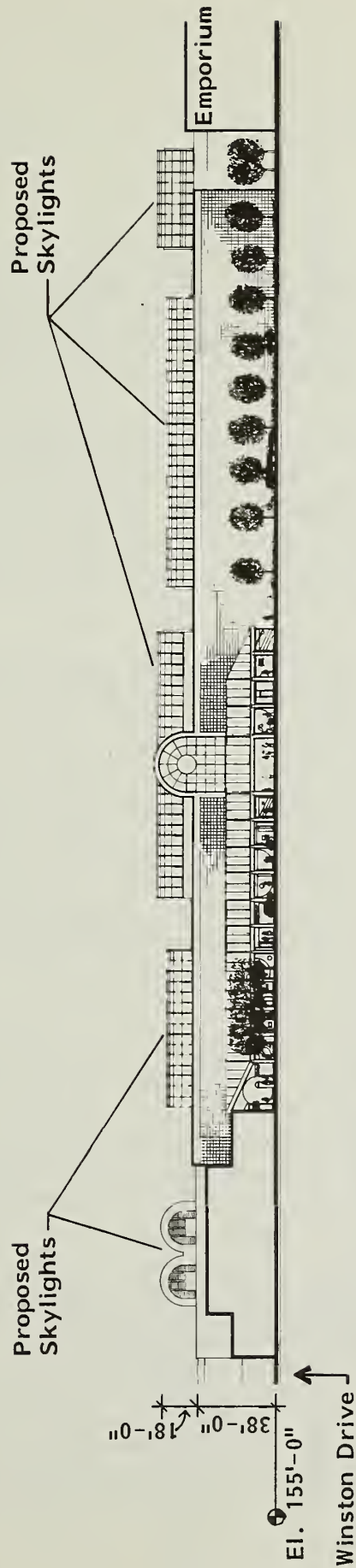


Figure 6. SECOND LEVEL PLAN

PEDESTRIAN AREAS



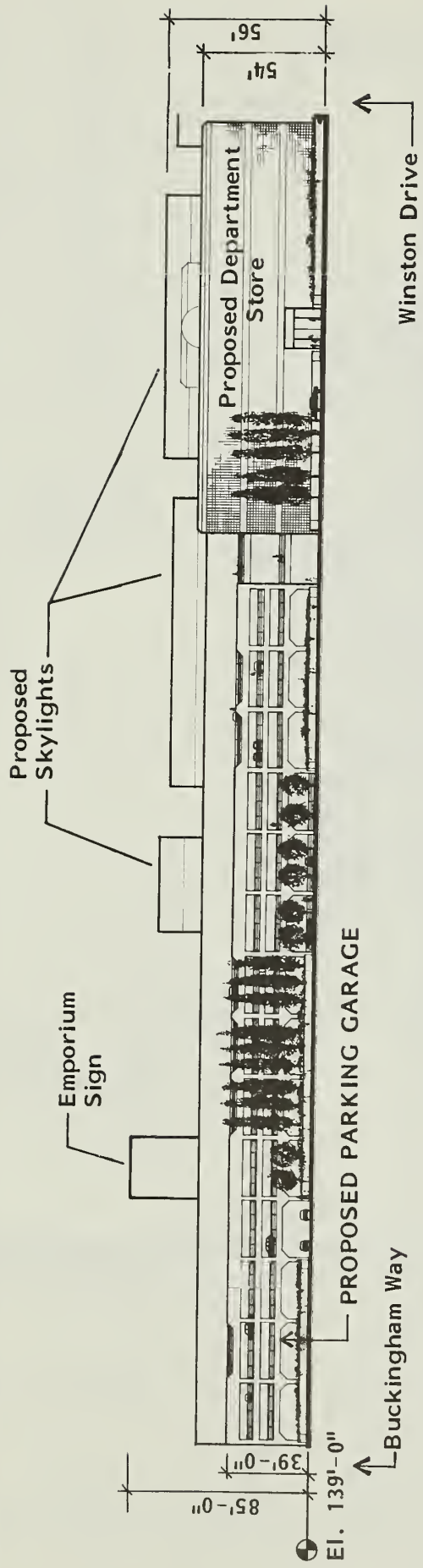
STONESTOWN SHOPPING CENTER
RENOVATION AND EXPANSION



View from Nineteenth Avenue

Figure 7. EAST ELEVATION

STONESTOWN SHOPPING CENTER
RENOVATION AND EXPANSION



View from Buckingham Way West of the Site

Figure 8. WEST ELEVATION

STONESTOWN SHOPPING CENTER
RENOVATION AND EXPANSION

Retail Construction

Mall Area

A total of 317,802 square feet of new retail area would be built (177,380 square feet on the mall level and 140,422 square feet on the second level), and the pedestrian walkway between the mall buildings would be enclosed (see Figures 3, 5, and 6 pages 21, 23, and 24).

- The mall enclosure would consist of 18-foot-high skylights (which may be vaulted or arched) interspersed with flat roofs (see Figures 3 and 7, pages 21 and 25). The total building height of the two-story mall buildings plus the skylight would be 56 feet above grade.³ The total pedestrian circulation area (two levels) would be 81,673 square feet.
- The existing second-story pedestrian bridge over Winston Drive would be expanded to two levels. The mall north of Winston Drive would be extended south -- over Winston Drive and under the existing bridge -- to connect with the buildings on the south side of Winston Drive. The existing second level bridge would be expanded to the west. The modified bridge would provide access to areas north and south of Winston Drive on two levels and would be developed with 25,178 square feet of retail area.⁴ In order to maintain vehicular access, Winston Drive would be excavated below the proposed bridge, as discussed under Circulation, page 30.

The existing Emporium and former Bullock's buildings would remain essentially unchanged by this project. A skylight would be added to the stairway connecting the former Bullock's building and existing parking garage, and a pedestrian bridge would connect the proposed new garage (page 28) and the second floor of the Emporium building. (The vacant Bullock's

³ Where the roof is flat, the building height would be 38 feet (19 feet per floor).

⁴ The existing area of the pedestrian bridge (7,595 square feet) would be converted to retail use. The additional area proposed would provide for pedestrian circulation and more retail space. The resulting bridge would extend the mall across Winston Drive on both levels by providing corridors flanked by retail shops. The 25,178 square feet of retail space would include 9,648 square feet on the mall level and 15,530 square feet on the second level. The bridge's pedestrian circulation area would include 4,332 and 4,334 square feet on the mall and second levels, respectively, for a total of 8,666 square feet.

II. PROJECT DESCRIPTION

building is expected to be occupied by a new tenant, and the vacant Joseph Magnin's building would be leased.)

New Department Store

A new, 148,000-square foot department store would be built in the existing parking lot west of the existing mall buildings. The new department store would include four levels: a one-level basement, a first floor, a 11,500-square foot mezzanine, and a second floor. The building and the proposed parking garage would be designed and built by the tenant, not the project sponsor. The maximum size would be 148,000 square feet of gross floor area (150,000 gross leasable area); no other details are known about the building.

The total building height would be about 54 feet above grade, not including exceptions such as mechanical penthouses allowable under the Planning Code. The roof of the proposed department store would be the same height as the two-story mall buildings where their roofs are flat and 18 feet lower than the proposed 18-foot skylight.

Access to this building would be at grade from the western parking lot directly into the basement level of the department store. There would be direct access to buildings east of the new department store at the basement, first, and second floors. Two pedestrian bridges would connect the first and second floors of the department store to the proposed new parking garage to the north.

Parking

The project would result in 4,470 parking spaces through construction of a new garage, conversion of other existing uses to parking, and restriping surface parking areas, a 1,156-space increase over the existing parking supply (3,314 spaces) -- 35% more spaces than under existing conditions. Of the 4,470 total spaces, up to 1,420 spaces (32%) would accommodate compact cars, and 3,050 spaces (68%) would accommodate standard size cars. (See Table 1, page 20, Appendix B, page A-31, Figure 27, page 96, and Parking Impacts, pages 88-94.)

II. PROJECT DESCRIPTION

Loading

The proposed project would provide a total of 40 loading spaces for delivery and service vehicles -- 20 new and 20 existing spaces. Thirty loading spaces would accommodate large trucks, and ten would be for vans. Sixty-four existing loading bays would be eliminated with the conversion of the mall basement to parking. These 64 bays serve the warehouse uses which also would be eliminated. The 20 existing spaces to remain are located at the grocery market south of Winston Drive (nine spaces), former Bullock's (four), and Emporium (seven). These 20 loading spaces accommodate full-size trucks and trailers. The 20 new loading spaces would be provided as follows:

- Five loading spaces in the basement level with access from the west via a new road between the proposed parking garage and department store.
- Five loading spaces on the mall level immediately west of the western mall buildings and south of the proposed new department store.
- Four loading spaces on the mall level immediately west of the western mall buildings between the proposed new department store building and garage.
- An at-grade service drive with six loading spaces immediately east of the eastern mall buildings. Three spaces would be opposite the existing Emporium building, and three spaces would be located to the south of the proposed new entrance into the mall.

Circulation

The project would include the following changes to on- and off-site circulation areas (see Figure 27, page 96).

- A new entrance to the site would be built on Nineteenth Avenue north of the Winston Drive and south of the Eucalyptus Drive intersections with Nineteenth Avenue (immediately north of the Temple Baptist Church). The entrance would provide right-turns out of the site onto Nineteenth Avenue southbound and left-turns into the site for drivers traveling northbound on Nineteenth Avenue. A left-turn pocket would be provided on northbound Nineteenth Avenue adjacent to the Muni Metro right-of-way, and a traffic signal would be installed at the proposed new intersection. The signal is proposed to have a mechanism which would

II. PROJECT DESCRIPTION

enable Muni Metro vehicles to override the signal, so as to have the right-of-way over cars turning left at this intersection. The three northbound through lanes would each be moved one lane to the east which would require the elimination of about 35 curbside parking spaces along the east side of Nineteenth Avenue from the proposed entrance south to Winston Drive.

- The new entrance would connect to a new access road within the site. This road would parallel Nineteenth Avenue for approximately 330 feet north and turn west for 240 feet. This road would become the east leg of the Buckingham Way-Twentieth Avenue intersection (now 3-way) which would be realigned and reconstructed as part of the project. The access road would be two lanes wide (one lane in each direction).
- Twentieth Avenue would be realigned and widened from two to three lanes (one lane in each direction plus a turning lane). About 720 feet of Twentieth Avenue now bordering the mall buildings would be moved about 225 feet east within the existing parking lot. The Twentieth Avenue intersections with Buckingham Way and Winston Drive would not be moved, but the roadway would be realigned to curve away from the mall buildings into the parking lot and back toward the mall buildings between the two intersections.
- A ramp would be built to the new mall basement parking area from the realigned Twentieth Avenue in the eastern parking lot.
- Winston Drive would be reconstructed from its intersection with Twentieth Avenue to about 210 feet east of its intersection with Buckingham Way. The roadway would be excavated about 20 feet. Winston Drive would rise nine feet to the western entrance of the existing parking garage (as Winston Drive curves north to Buckingham Way). The reconstruction of Winston Drive would eliminate the existing grade level pedestrian crossing of Winston Drive (which would be replaced with a mall level pedestrian bridge). ⁵
- The existing service driveway and parking lot entrance on Buckingham Way west of the site (near Winston Drive) would be moved south, opposite the Winston Drive-Buckingham Way intersection to serve as the

⁵ Beams spanning Winston Drive to support the mall level addition to the bridge could be up to four feet thick, making the bottom elevation of the bridge 14 feet above the depth of the proposed excavation. If less thick beams are used, more clearance could be provided; alternatively, less area would need to be excavated.

II. PROJECT DESCRIPTION

entrance to the new parking garage, and would become the fifth (east) leg of this intersection.

- The reconstruction of Winston Drive and realignment of Twentieth Avenue would require the permanent relocation of five Muni bus stops (see Figure 26, page 87).
- Existing roadways on the site would resurfaced as necessary, and the parking lots would be restriped.

Some landscaping would be removed and some new landscaping would be provided with the project, according to a landscape plan to be developed.

Exterior building materials and facade ornamentation would include cement, plaster, or similar material, ceramic tile, and glazing. Benches, signage, lighting fixtures, colored paving patterns, and other interior elements would be included and coordinated.

Employment

The addition of 305,870 square feet of commercial area ⁶ would create an estimated 680 new retail jobs, for about 2,170 permanent on-site jobs with full occupancy. Part-time, seasonal employment could increase the retail workforce by 20% to 50% (385 to 960 additional jobs).

Demolition of the mezzanine level offices at mall buildings would displace eight businesses which employ about 45 workers. (Another business employing 26 workers moved in September, 1985 in anticipation of displacement by the proposed project.)

D. PROJECT SCHEDULE, COST, AND REQUIRED APPROVALS

Project construction is expected to occur between 1986 and 1989, during which time the existing shopping center would remain open. After approval and issuance of building permits, demolition and construction would take

⁶ New department store (148,000 square feet), mall level retail space (17,448 net new square feet), and new mall second story (140,422 square feet).

II. PROJECT DESCRIPTION

about 34 months. The estimated duration of each activity would be as follows: ⁷

Demolition and clearance	10 weeks
Excavation	6 weeks
Foundation preparation	8 weeks
Steel erection	12 weeks
Exterior finishing	22 weeks
Interior finishing	30 weeks

The order of project development is planned to be as follows: ⁸

First, Nineteenth Avenue entrance and access road construction; reconstruction of Winston Drive; construction of underpass (demolish tunnel and close one parking garage entrance), ramp to basement parking, and basement parking (including foundation support for second-story mall construction); realignment of Twentieth Avenue; and reconstruction of the Twentieth Avenue-Buckingham Way Intersection (Winston Drive would be closed to traffic for approximately five months).

Demolition of mall buildings (one month) and construction of new two-story mall buildings and enclosure of mall (14 months).⁹

Construction of new department store and parking garage (15 months).

The vacant department store (former Bullock's) is expected to be occupied by a new tenant and opened during 1987, concurrent with project construction. Mall construction would be completed and occupancy is expected in 1988. The completion and occupancy of the new department store are planned by 1989.

⁷ The number of weeks is the total amount of time for all elements of the project some of which would occur simultaneously. Peter Nosler, Rudolph and Sletton (sponsor's contractor), telephone conversation, August 9, 1985.

⁸ Letter to Dick Blach, Rudolph and Sletton, from Paul Jay Meade, AIA, Field/Gruzen, July 24, 1985. A copy of this letter is available for review at the Department of City Planning, Office of Environmental Review, 450 McAllister Street, Sixth Floor.

⁹ Mall demolition and construction is expected to be in two phases during this period to enable temporary relocation of existing retail tenants. Skip Wall, Stoneson Development Corporation, telephone conversation, December 30, 1985.

II. PROJECT DESCRIPTION

Cost

The estimated construction cost would be about \$36,900,000 (1985 dollars). ¹⁰

Approval Requirements

Certification of the Environmental Impact Report (EIR) by the City Planning Commission, following public review of the Draft EIR (DEIR) and responses to comments collected during the DEIR review period, would be the first step in obtaining the required approvals for the proposed project. No permits may be issued before the Final EIR is certified.

A Final Environmental Impact Report (EE76.74) for renovations to Stonestown Shopping Center was certified by the San Francisco Planning Commission on October 14, 1976 (Resolution No. 7578). That project included a new department store which was built (Bullock's), an adjacent five-level parking structure (which was built), a pedestrian bridge over Winston Drive (completed), and enclosure of the mall (not implemented). An amendment (EE77.324) to the EIR was certified by the Planning Commission, April 5, 1979 (Resolution 8202). This amendment covered expansion of the mall by addition of a partial second level of stores and a roof over the mall, construction of a three-level parking garage to be located east of the mall in the parking area (compared with the location west of the mall now proposed), and a new access road to connect Nineteenth Avenue with Twentieth Avenue just north of the proposed garage. (None of these changes were implemented.)

The Stonestown Shopping Center was originally developed under City Planning Commission Resolution 3721, adopted March 16, 1950. The stipulations of this resolution have been modified several times. On October 14, 1976, the Commission approved two applications (Nos. CU76.32 and CU76.31) for Conditional Use, adopting Resolution 7579 and 7580 ¹¹, for construction of

¹⁰ Letter to A. F. Schumacher, The Stoneson Development Corporation, from Peter Nosler, Rudolph and Sletton, Inc. (sponsor's contractor), August 1, 1985 (a copy of this letter is available for review at the City Planning Department, Office of Environmental Review, 450 McAllister Street, Sixth Floor), and Skip Wall, Stoneson Development Corporation, telephone conversation, January 5, 1986. About \$7,200,000 of this total would be the estimated construction cost of the proposed department store (to be built by the tenant).

¹¹ Application No. CU76.32, Resolution 7579, October 14, 1976 and Application No. CU76.31, Resolution 7580, October 14, 1976.

II. PROJECT DESCRIPTION

the Bullock's department store, the bridge over Winston Drive, and the parking garage. On the same date, the Commission reported Master Plan Referral R76.22, authorizing the Director of Planning to report that a vacation of certain air rights for the bridge structure would conform to the City Master Plan. The Board of Supervisors adopted Resolution 852-76 on November 1, 1976, declaring its intention to vacate certain air space.

Additions to the pedestrian bridge in the air space covered by the quitclaim deed would require a new quitclaim deed, Master Plan referral from the Planning Commission, and Board of Supervisors' approval. Conditional Use authorization from the City Planning Commission would be necessary to obtain an exception to the City's bulk requirements for the portions of the proposed department store and skylight, which would exceed the maximum length and diagonal dimensions above 40 feet. Conditional Use authorization would also be necessary to modify previous conditions, including Resolution 5490, January 25, 1962, requiring more parking and circulation than is currently proposed. (See pages 92-94 for a discussion of Resolution 5490.)

The project design (including the lowering of Winston Drive) would require review and authorization by the San Francisco Department of Public Works. The proposed new access road and its intersection with Nineteenth Avenue would require approval by the Municipal Railway and authorization by the San Francisco Department of Public Works. Relocation of bus stops would require Muni approval. ¹²

The portion of the project affecting Nineteenth Avenue would also require approval of an Encroachment Permit by the California Department of Transportation (Caltrans), to build a new entrance onto a State Highway, relocate the traffic lanes each one lane east and eliminate about 35 curbside parking spaces on the east side of the roadway. ¹³ The proposed signal at the left-turn pocket opposite the new entrance would require a maintenance agreement by Caltrans with the City. ¹⁴

¹² Memorandum from K. L. (Dan) Wong, San Francisco Municipal Railway, September 25, 1985.

¹³ Rod Carlisle, District 04, California Department of Transportation, telephone conversation, July 19, 1985.

¹⁴ Ging Chin, District 04, California Department of Transportation, telephone conversation, December 30, 1985.

III. ENVIRONMENTAL SETTING

III. ENVIRONMENTAL SETTING

A. LAND USE AND ZONING

Land Use

Stonestown Shopping Center is a regional shopping center which, at the same time, serves the residential communities of southwest San Francisco. It is the only regional shopping complex in San Francisco outside of downtown and provides retail uses for residents whose travel time to downtown is relatively long.

Existing surrounding land use includes residential, commercial, and institutional uses (see Figure 9, page 36). The areas north and east of Stonestown consist primarily of one- and two-story single-family residential development (built in the 1930s and 1940s) with street trees and some landscaping. The area south and west of the site is an apartment development, built in 1950 and owned by the project sponsor, containing 323 units developed in ten two- and three-story garden apartment buildings and 360 units in four, ten-story apartment towers. The San Francisco State University campus lies beyond the apartments to the south and west; an undeveloped parcel owned by the University adjoins the site on the west. A fire station is located immediately west of the site, in the southern corner of the Buckingham Way-Winston Drive intersection. Two churches and a school are north of the site on Eucalyptus Drive. Another church is located on Nineteenth Avenue directly east of the site. Nineteenth Avenue, a six-lane major thoroughfare, includes tracks of the Municipal Railway in a median and separates the project site from the single-family residences to the east. Mercy High School is directly across Nineteenth Avenue from the site; Lowell Senior High School is northwest of the site on Eucalyptus Drive, west of Rolph Nicol Park (see below). Local community shopping areas are located along Ocean Avenue and West Portal Avenue to the northeast of the site. Sigmund Stern Grove is located at Sloat Boulevard and Nineteenth Avenue, within one-half mile north of the site, Rolph Nicol Park (a mini-park) is northwest of the site on Eucalyptus Drive, and Lyndhurst Playground is east of Nineteenth Avenue.

Development on the project site includes (see Figure 2, page 17, and Table 1, page 19):

- Two department store buildings located at the north and south ends of

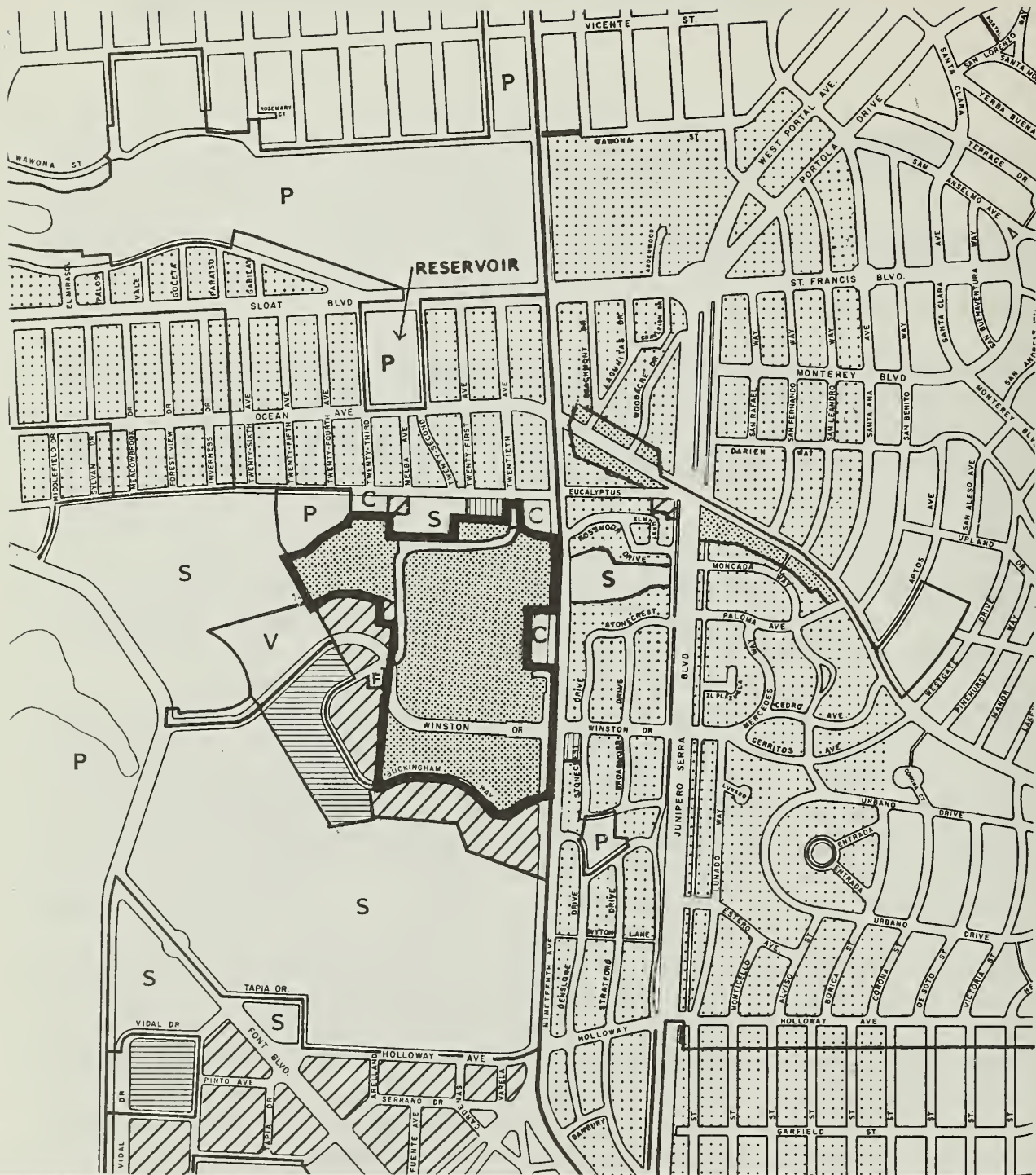
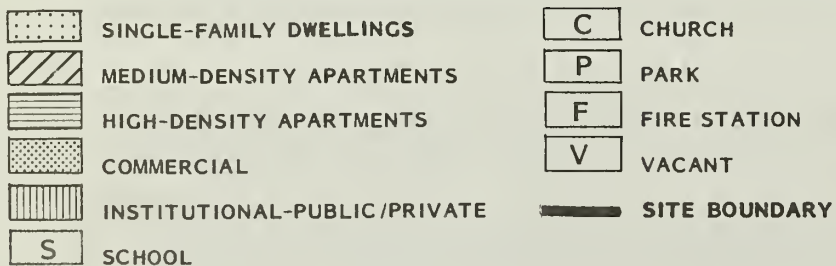


Figure 9. EXISTING LAND USE



STONESTOWN SHOPPING CENTER
RENOVATION AND EXPANSION

0 800 Ft.

III. ENVIRONMENTAL SETTING

the shopping center. The former Bullock's is vacant; the Emporium is occupied.

- Four mall buildings with retail shops on the mall level, and offices, retail shops (accessible from the mall shops), and storage facilities on the mezzanine. Mall buildings' basement loading, retail, and warehouse facilities ¹⁵ include an existing health club which would be retained with conversion of other uses to parking. ¹⁶ Sixty-four loading bays are provided in the mall basement, which serve warehouse space located there. Access to the basement is provided from the west side of the site via Buckingham Way and a surface parking lot. ¹⁷ A tunnel under Winston Drive connects the basements of buildings located north and south of Winston Drive and is used exclusively for service (no public access). The basement service area exits onto Buckingham Way, south of the grocery market building located between Winston Drive and Buckingham Way.
- A second-story pedestrian bridge over Winston Drive connecting the mall with the second floor of the former Bullock's building. (The bridge is closed because the former Bullock's building is vacant; a crosswalk under the bridge provides access across Winston Drive at grade.)
- A 670-space parking garage located between Buckingham Way and Winston Drive, west of the former Bullock's building. Vehicular access to the garage is provided on Buckingham Way and Winston Drive. Direct pedestrian access into the former Bullock's building currently is

¹⁵ Warehouse area (97,138 square feet) is used by businesses which have stores at Stonestown and other locations but which use Stonestown for their central warehouse because the space is available. Idamay Brewster, Stoneson Development Corporation, telephone conversation, July 8, 1985. Another 29,352 square feet in the basement are retail and loading area (for a total basement area of 126,490 square feet). Basement retail area is accessible only from mall level shops (similar to access to the mezzanine retail areas.) Another basement is provided in the grocery market building south of Winston Drive; this area would not be affected by the proposed project.

¹⁶ Access to this 8,580-square foot facility is directly from the western parking lot. Access also would be provided by escalators and elevators to the mall and second levels with the project. Sudhish Mohindroo, Field/Gruzen, telephone conversation, January 23, 1986.

¹⁷ This access is possible from the west because the ground level of the western parking lot is 16 feet lower than the surface elevation of the pedestrian mall. An additional 20 loading spaces are provided (four at the former Bullock's building, nine at the grocery market building south of Winston Drive, and seven under the Emporium building) for a total of 84 loading spaces on-site.

III. ENVIRONMENTAL SETTING

closed, and pedestrians use ground level sidewalks and crosswalks to access the garage.

Other commercial and office buildings are part of the shopping center complex but would not be affected by the proposed project. ¹⁸ They include:

- The Petrini's grocery market building immediately east of the former Bullock's store between Winston Drive and Buckingham Way.
- The vacant, former Joseph Magnin's building.
- The five-story Stonestown Medical-Dental Building on the northwest corner of the Buckingham Way-Twentieth Avenue intersection.
- Stonestown's administrative offices, a savings and loan, and an automobile dealership at the northeast corner of the Buckingham Way-Twentieth Avenue intersection.
- A movie theater and a savings and loan, both west of Buckingham Way, a gas station at the southeast corner of the site, and an automobile supply store.

Commercial area within the shopping center is divided into approximately 75 retail spaces. Not all commercial area at Stonestown is occupied. ¹⁹ As of July, 1985, 16 shops (21% of shops) were vacant (225,775 square feet). ²⁰ Occupancy at the shopping center has declined due to chain-wide store closures, individual store closures, and leasing decisions pending the proposed renovation and expansion of the shopping center. ²¹ Of the 16 vacant shops, two have been vacant since 1982, four since 1983 (including Joseph Magnin), seven since 1984 (including Bullock's and Roos/Atkins), and three have been vacated in 1985. Eight of the 16 vacancies include

¹⁸ Commercial and office uses of these buildings contribute to traffic generation and parking demand at Stonestown and, therefore, are included in all area calculations.

¹⁹ The International Council of Shopping Centers, Washington, D. C., has no information which indicates average occupancy rates for regional shopping centers. Successful centers can be 100% occupied and have waiting lists. There is no standard industrywide rule-of-thumb about what constitutes normal vacancy or occupancy of shopping centers. Sudhish Mohindroo, Field/Gruzen, telephone conversation, November 6, 1985.

²⁰ Bullock's (146,195 square feet), Joseph Magnin's (34,354 square feet), and mall shops (45,226 square feet) of gross floor area (GFA).

²¹ Idamay Brewster, telephone conversation, July 8, 1985.

businesses which closed all Bay Area stores.

The mall buildings' mezzanines provide about 13,700 square feet of offices and are occupied by nine businesses. As of July, 1985 tenants include two law offices, a structural engineering firm, an insurance brokerage, a travel agency, an accountant, a mortgage brokerage, a tax consultant, and a home loan financing business. All mezzanine office space is occupied (and all doctors' suites at the medical building are occupied). However, not all the mezzanine retail space is occupied.

The site slopes downhill from Nineteenth Avenue southwest to the Buckingham Way-Winston Drive intersection for a 30-foot drop in elevation between the eastern and western site boundaries. Within the site, the elevation of the pedestrian mall is 16 feet higher than the mall basement and the at grade west access to the basement. This means that the basement under the mall buildings is subsurface while also at grade with the western side of the site. ²²

Zoning

The project site is located in a C-2 (Community Business) District, as shown in Figure 10, page 40. The area surrounding the project site is zoned for public uses (primarily schools, churches, and parks), for medium and high density residential uses to the west and south, and predominantly for single-family residential uses to the north and east.

The applicable height and bulk district for the site is 65-D (Figure 11, page 41), which allows a building height of up to 65 feet. The maximum dimensions of a "D" bulk district allow full-site coverage up to 40 feet. Between 40 feet and the 65-foot height limit, the maximum building length is 110 feet and the maximum diagonal dimension is 140 feet. The basic allowable floor area ratio (FAR) in the C-2 District is 3.6:1; thus, any building on the site may contain a gross area of up to 3.6 times the area of the lot.

In the immediate project vicinity, development is planned by San Francisco State University (SFSU) in accordance with its campus master plan (up to

²² Because of this difference, areas below the level of the pedestrian mall surface are called basements, and areas at the mall level elevation are called mall level or first floors. Levels above the mall surface are called mezzanines and second floors.

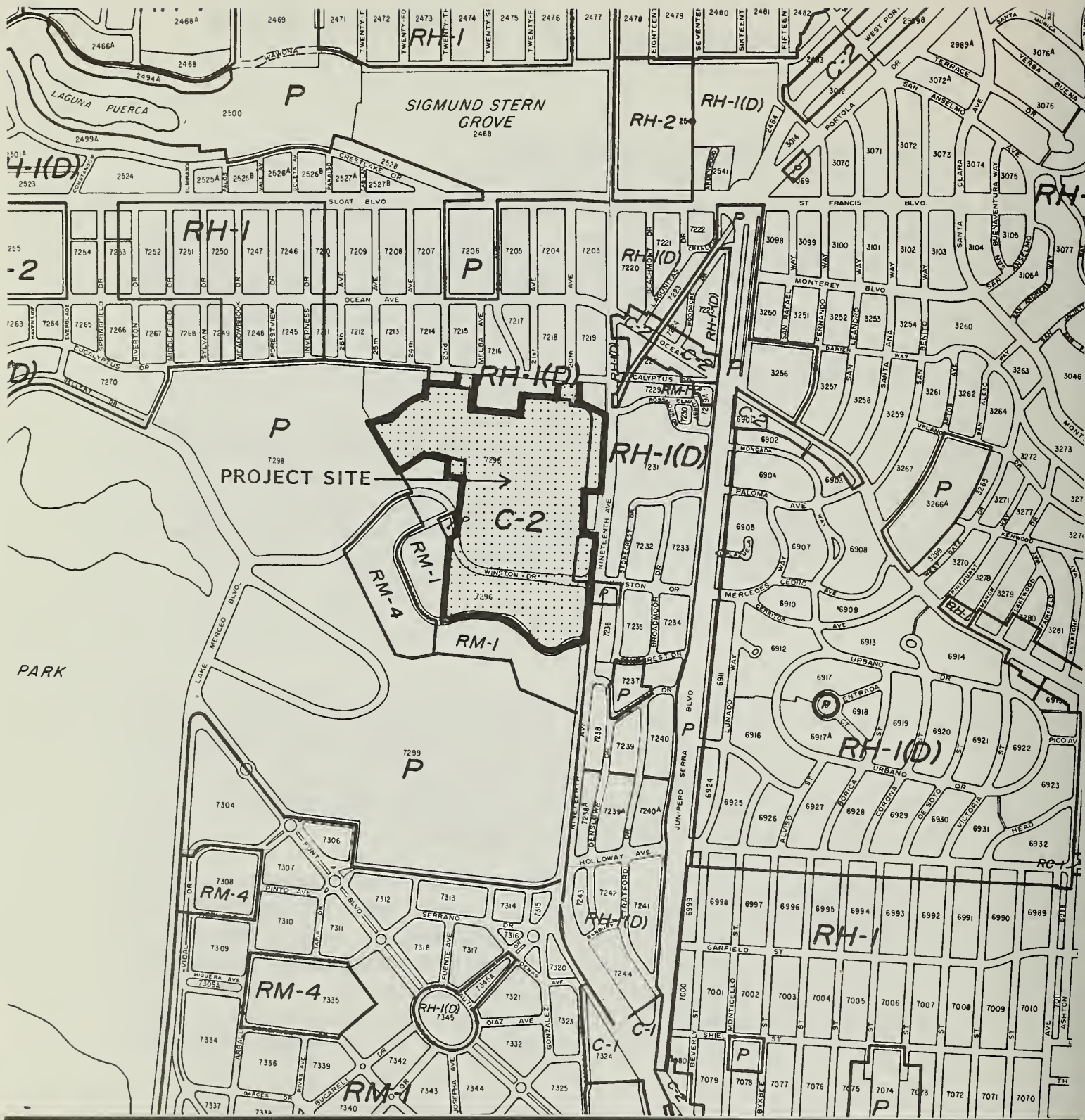


Figure 10. USE DISTRICTS

HOUSE CHARACTER DISTRICTS

RH-1(D) **RH-1** **RH-1(S)** **RH-2** **RH-3**

MIXED HOUSE & APARTMENT CHARACTER DISTRICTS

RM-1 **RM-2** **RM-3** **RM-4**

RESIDENTIAL-COMMERCIAL COMBINED DISTRICTS

RC-1 **RC-2** **RC-3** **RC-4**

COMMERCIAL DISTRICTS

C-1 **C-2** **C-3-O** **C-3-R** **C-3-G** **C-3-S** **C-M**

INDUSTRIAL DISTRICTS

M-1 **M-2**

PUBLIC DISTRICT

P



SITE BOUNDARY



NORTH

**STONESTOWN SHOPPING CENTER
RENOVATION AND EXPANSION**

Source: City and County of San Francisco Municipal Code

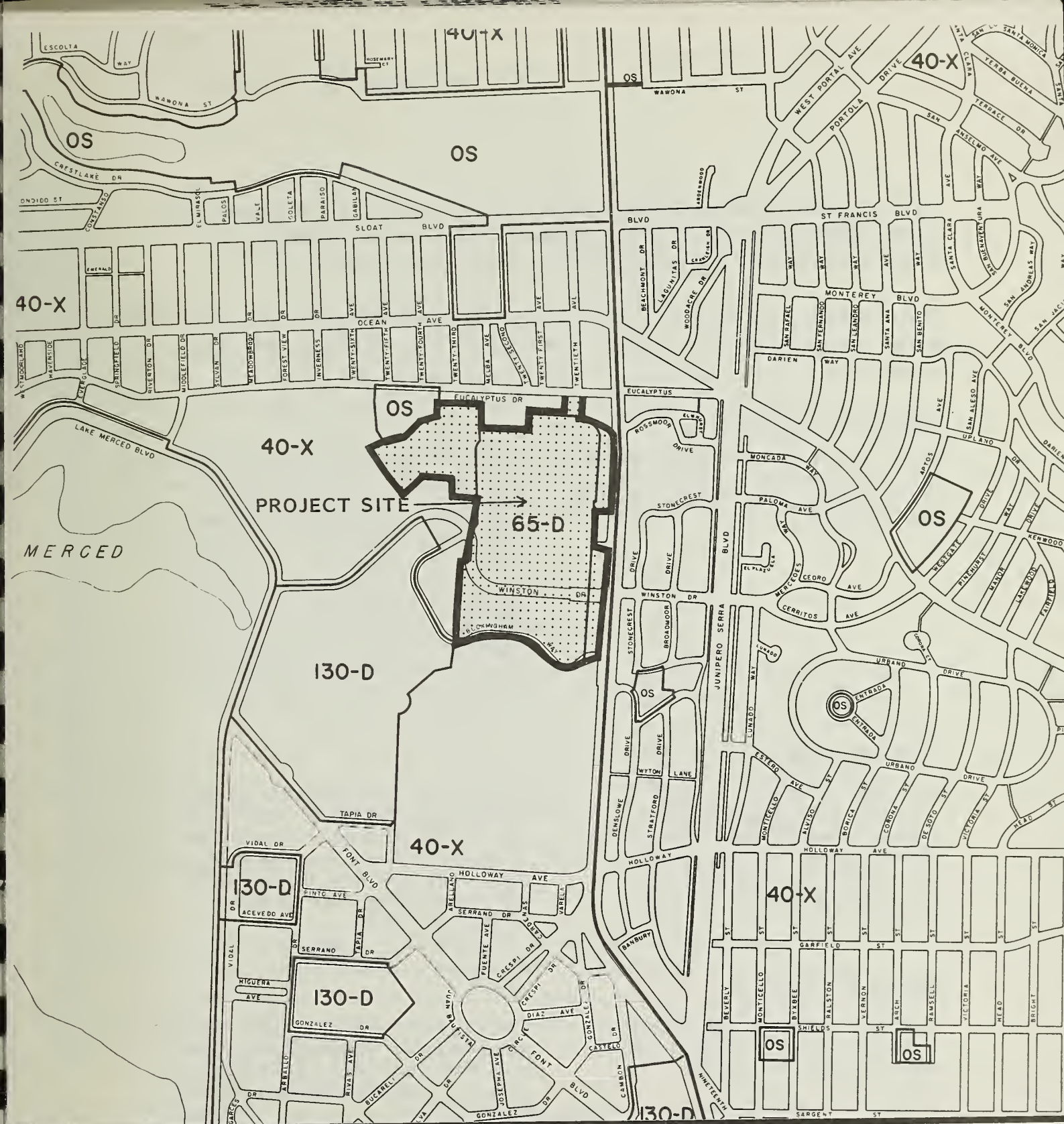
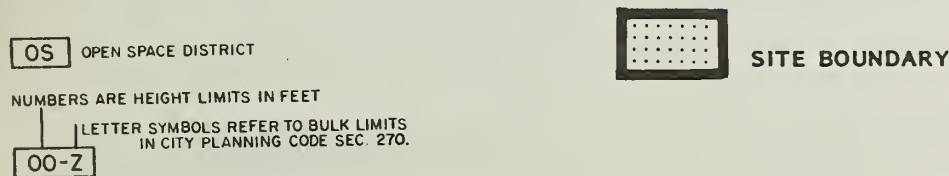


Figure 11. HEIGHT AND BULK DISTRICTS



STONESTOWN SHOPPING CENTER
RENOVATION AND EXPANSION

0 800 Ft.

Source: City and County of San Francisco Municipal Code

III. ENVIRONMENTAL SETTING

147,000 square feet over the next five or more years). ²³ This would add 2,600 Full Time Equivalent (FTE) students to the current enrollment of 17,400 FTE students for 20,000 full time equivalent students.

The Commerce and Industry Element of the Comprehensive Plan of San Francisco contains objectives and policies which relate to the project area and the project. ²⁴

Objective 2, Policy 1:

"Seek to retain existing commercial and industrial activity and to attract new such activity to the City" (page 8).

The proposed project would respond to this policy by retaining and expanding existing commercial activity at Stonestown. Existing land use at Stonestown Shopping Center is commercial. The proposed mix of three department stores and additional retail shops is intended by the sponsor to maintain existing commercial activity and attract new stores to the shopping center and the southwest area of the City.

Objective 3, Policy 1:

"Promote the attraction, the retention, and expansion of commercial and industrial firms which provide employment improvement opportunities for unskilled and semi-skilled workers" (page 10).

The project would provide up to about 200 construction jobs during the 34-month construction period. The project would provide approximately 680 new jobs for unskilled and semi-skilled workers at the shopping center.

Objective 7, Policy 2:

"Support the continued strength of high quality, specialty trade shopping facilities in the Retail Core" (page 29).

The proposed project would increase the amount of retail space outside the downtown retail core of the City. The southwest area of the

²³ Dean Parnell, Facilities Planning and Operations, San Francisco State University, telephone conversation, July 17, 1985. Approximately 67,000 square feet of additions to existing facilities are planned to be built within the next two years. Another 80,000-square foot building, a 600-bed dormitory/apartment building, and a 1,200-space parking garage are included in the campus master plan but would not be built for five or more years.

²⁴ San Francisco Department of City Planning, Commerce and Industry Element, adopted by the City Planning Commission, Resolution 8001, June 29, 1978.

City (the primary service area for Stonestown Shopping Center) is about five miles from downtown and is served by the existing Stonestown Shopping Center.

The proposed amendments to the Master Plan and the text and maps of the City Planning Code described in the Neighborhood Commercial Rezoning Study (Department of City Planning, February, 1985) would not apply to the project site. No change in zoning is proposed for the Stonestown Shopping Center in the study; its designation would remain C-2 (Community Business).²⁵ The Department of City Planning intends, in the future, to reexamine areas zoned C-2, which were excluded from the Neighborhood Commercial Rezoning Study.²⁶

B. URBAN DESIGN AND VISUAL QUALITY

In general, Stonestown is a low, horizontal commercial development, with larger commercial buildings at either end, surrounded by surface parking. The site is dominated by two large department stores located at the north and south ends of the mall buildings. The pedestrian area between the mall buildings is open to the sky. Pedestrian access across Winston Drive is provided both at grade and via the second-level bridge. A grocery is located at the southeast corner of the built portion of the site. Photographs of the site are provided in Figures 13 through 17, pages 45 through 49.

The site is seen primarily by people driving on Nineteenth Avenue and surrounding streets and by residents of nearby homes and apartments. From Nineteenth Avenue the site slopes west approximately 15 feet down to the retail buildings, and the viewer sees these buildings with large parking areas in the foreground. At the center of the site the view of Stonestown is screened by a church.

The site's parking areas contain lighting standards, trees, low plantings, and signage. The bridge to the department store at the south of the site is an entry into the westernmost parking area (where the proposed new department store and parking garage would be located). This western area, between the existing mall buildings and the perimeter roads, Winston Drive

²⁵ Lori Yamauchi, Department of City Planning, telephone conversation, July 17, 1985.

²⁶ Ibid.

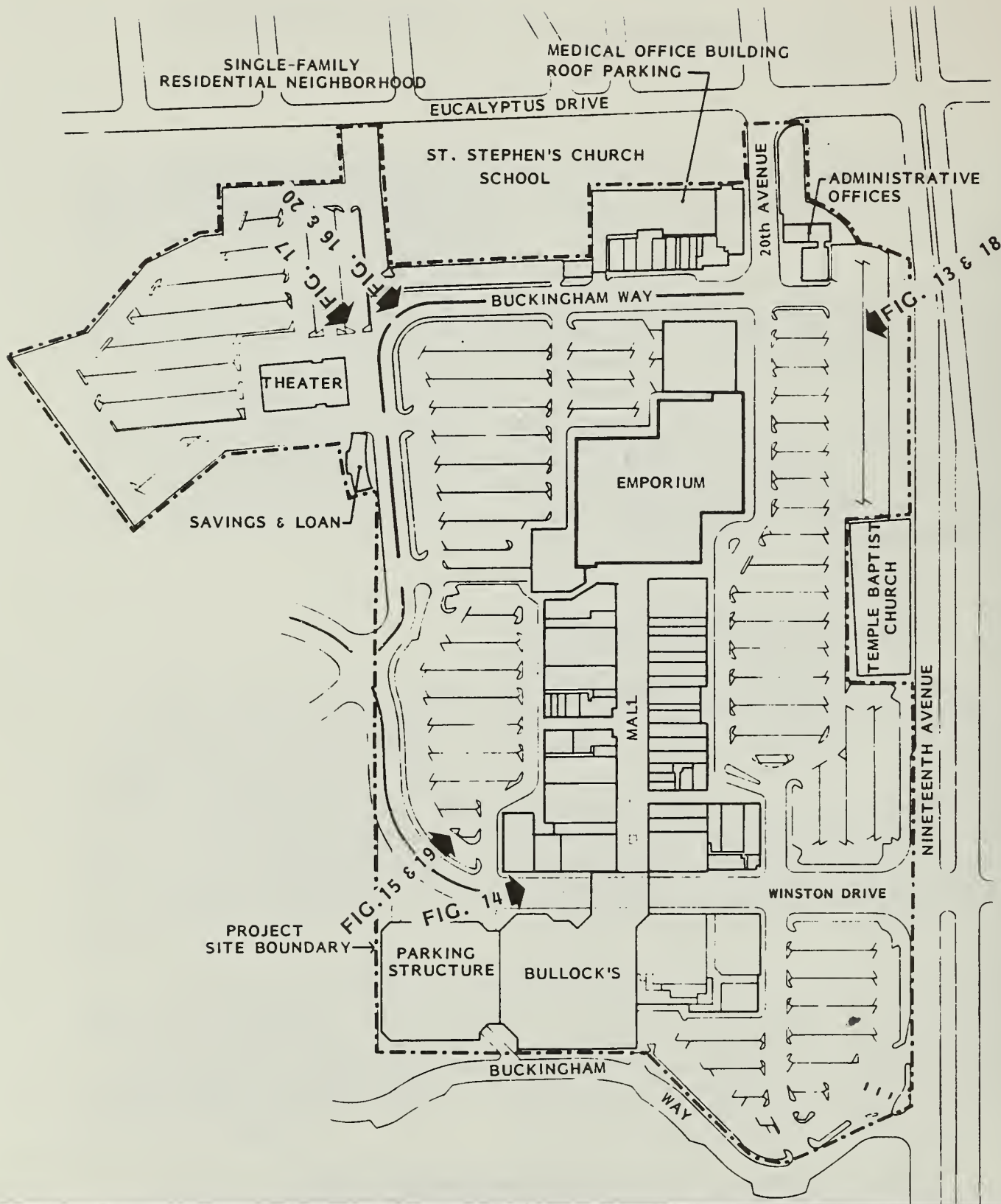


Figure 12. PROJECT AREA PHOTO LOCATIONS



STONESTOWN SHOPPING CENTER
RENOVATION AND EXPANSION

0 100 200 300 Ft.



Figure 13. VIEW FROM NINETEENTH AVENUE LOOKING SOUTHWEST

STONESTOWN SHOPPING CENTER
RENOVATION AND EXPANSION

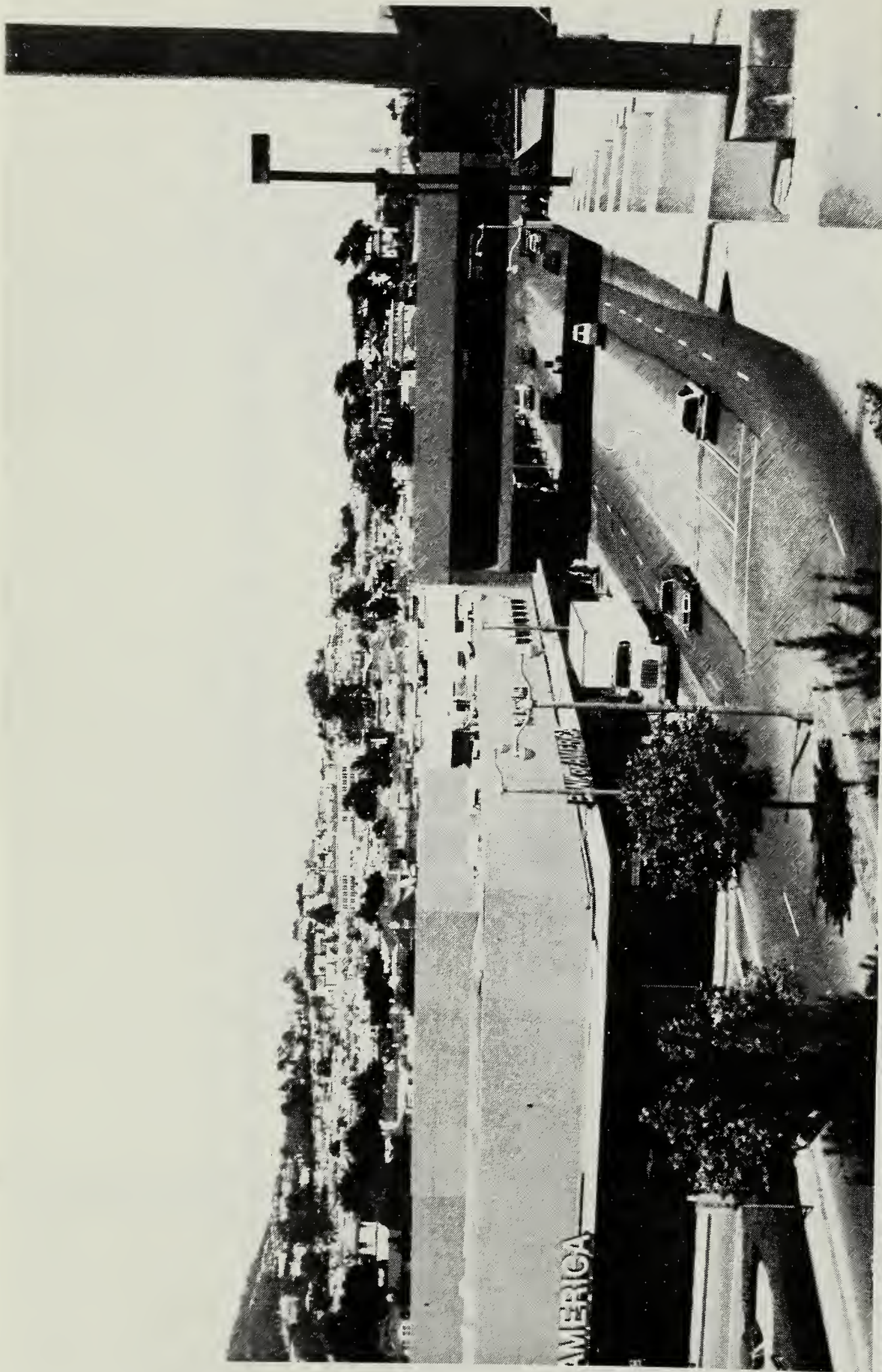


Figure 14. VIEW FROM EXISTING GARAGE LOOKING EAST
AT BRIDGE OVER WINSTON DRIVE

STONESTOWN SHOPPING CENTER
RENOVATION AND EXPANSION



Figure 15. VIEW FROM EXISTING GARAGE LOOKING NORTHEAST

STONE TOWN SHOPPING CENTER
RENOVATION AND EXPANSION

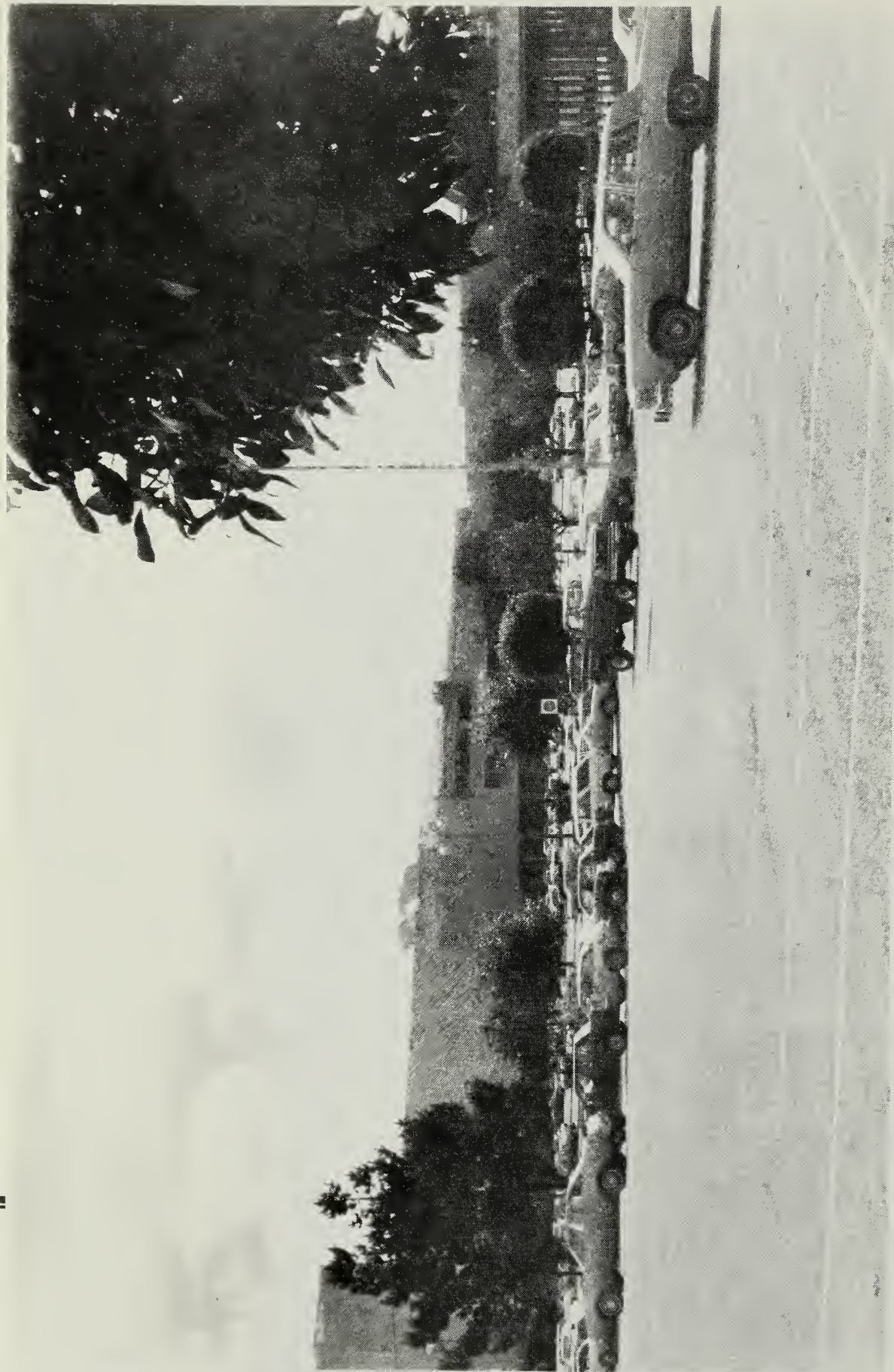


Figure 16. VIEW FROM NORTHWEST CORNER OF SITE
LOOKING SOUTHEAST

STONESTOWN SHOPPING CENTER
RENOVATION AND EXPANSION

Source: Michael Reardon



Figure 17. VIEW FROM NORTHWEST CORNER OF SITE LOOKING SOUTH

STONESTOWN SHOPPING CENTER
RENOVATION AND EXPANSION

III. ENVIRONMENTAL SETTING

and Buckingham Way, has less exterior finishing and less landscaping compared with the east facade which fronts Nineteenth Avenue. The predominant facade materials include painted masonry, brick, and typical storefront metal and glass trim. Signs identify individual stores.

North along Buckingham Way, at its intersection with Winston Drive at the west of the site, there are some limited views of the church tower and the top of a row of tall eucalyptus trees located along Sloat Boulevard to the north.

The shopping center center is served by a perimeter road system and surface parking. One five-story parking garage is located at the southwest corner of the site (across Winston Drive from the mall buildings). It is one level higher at its eastern side than it is at the west. Trucks and other service vehicles enter the basement area of the garage from the west without ramps. The pedestrian bridge over Winston Drive, as noted above, forms an entry to the shopping center.

North of Sloat Boulevard, the pattern of development closely follows Nineteenth Avenue with buildings constructed to the property line forming a medium density urban pattern. However, at Larsen Park (north of Stern Grove) and at Sigmund Stern Grove this strong urban pattern changes to large open space areas at the western side of Nineteenth Avenue. South of Sloat Boulevard the urban pattern changes to concentrations of medium- and high-rise housing with open space areas. The Stonestown Shopping Center site, the campus of San Francisco State University to the south, and the Parkmerced apartment areas farther south all create more informal urban design relationships with Nineteenth Avenue than the medium density, higher land coverage areas to the north. This change in urban pattern also occurs on Stonestown's perimeter roads (Winston Drive and Buckingham Way) where the regular residential parcels and the single-family house patterns of the areas to the north and east change to the larger parcels of the commercial and higher density housing areas of Stonestown and the nearby adjoining properties to the south and west.

C. SHADOW AND WIND

Shadow

Existing shadow areas around the perimeter of the Stonestown Shopping Center are shown in Figures 22, 23, and 24, pages 69, 70, and 71. The interior of the mall is partially in sun at midday in all seasons.

Wind

National Weather Service data show that westerly (i.e., from the west) to northwesterly winds are the most frequent and strongest winds during all seasons in San Francisco. ²⁷ Of the 16 primary wind directions measured, four wind directions -- northwest, west-northwest, west, and west-southwest -- comprise the greatest frequency of occurrence as well as the majority of strong wind occurrences.

Average wind speeds are highest during summer and lowest during winter months. However, the strongest peak winds occur during the winter, when average speeds of more than 34 miles per hour for one hour have been recorded. The highest average wind speeds are in the mid-afternoon, and lowest are in the early morning. Peak wind speeds are distributed evenly throughout the day.

For a more detailed discussion of existing and proposed conditions related to shadow and wind, see the impact analysis, page 62.

D. TRANSPORTATION, CIRCULATION AND PARKING

Streets

The Stonestown Shopping Center site is served by the following streets, major thoroughfares, and portions of the regional highway system (see Figure 1, page 16).

Nineteenth Avenue is designated as a major thoroughfare in the Transportation Element of the City Master Plan. ²⁸ It is the major north-south facility serving the site, with six lanes for traffic (three in each direction) for most of its length and a parking lane on both sides. Nineteenth Avenue is California State Route 1 and carries north-south through traffic, as well as local traffic.

²⁷ The National Weather Service data used in this analysis originally were acquired at the weather station atop the old Federal Building at 50 United Plaza, during the years 1945-1947, hourly on an annual basis for 16 wind directions.

²⁸ San Francisco Department of City Planning, Transportation Element, adopted by the City Planning Commission, Resolution 6834, April 27, 1972, and amended as of June, 1982, pages 24 and 27.

III. ENVIRONMENTAL SETTING

Left turns are prohibited at most signalized intersections of Nineteenth Avenue near the site. One exception to this prohibition is at the intersection of Winston Drive, which serves the site, where two left turn lanes are provided for northbound traffic. At this intersection the width of Nineteenth Avenue is approximately 104 feet, with five 12-foot northbound lanes (two left turn lanes and three through lanes) and four 11-foot southbound lanes.

To the north, at the intersection of Nineteenth Avenue and Eucalyptus Drive, the width of Nineteenth Avenue is approximately 83 feet, with three northbound lanes and three southbound lanes and parking on both sides of the street.

Nineteenth Avenue has been designated as a Transit Preferential Street in the Master Plan from Eucalyptus Drive south to Randolph Street. The Muni Metro M Line runs down the center of this street with a stop just north of the Nineteenth Avenue and Winston Drive intersection. Metro M Line service operates with six-minute headways on weekdays, 12-minute headways on Saturdays, and 15-minute headways on Sundays. For Metro M Line and Muni bus route information (lines 17, 18, 28, and 29 which also serve the project area) see Table 2, page 53 and Figure 25, page 84.

Lake Merced Boulevard is also designated as a major thoroughfare in the Master Plan. It is a four-lane street generally running north-south and intersects with Winston Drive west of the site. At the signalized intersection with Winston Drive, Lake Merced Boulevard has three northbound lanes and four southbound lanes with parking allowed on both sides of the street.

Winston Drive is an east-west street which traverses the site. It is not designated as either a major thoroughfare or secondary thoroughfare in the Master Plan. This street serves the shopping center circulation network between Nineteenth Avenue and Buckingham Way and varies in width from four to six lanes.

East of the Nineteenth Avenue signalized intersection (off-site), Winston Drive has two westbound lanes and one eastbound lane plus parking on both sides. West of Nineteenth Avenue, Winston Drive has three westbound lanes and three eastbound lanes with parking provided on both sides. The Winston Drive-Twentieth Avenue intersection is controlled by a four-way stop. West of Twentieth Avenue, Winston Drive has two westbound lanes and three eastbound lanes with parking prohibited on both sides.

TABLE 2
MUNI FREQUENCY OF SERVICE
(average time in minutes) a/

Route Name	Week day					Saturday					Sunday					
	First	7-9 AM	9-4 AM-PM	4-6 PM	Eve	Last	First	7-9 AM	9-6 AM-PM	Eve	Last	First	7-9 AM	9-6 AM-PM	Eve	Last
M Ocean View (Metro)	5:00	6	6	6	10	12:30	5:45	15	12	20	12:30	9:00	30	15	20	12:30
17 Parkmerced	6:30	20	20	20	20	12:00	6:30	20	20	20	12:00	6:30	20	20	20	12:00
18 46th Avenue	5:39	15	15	15	20	12:20	6:20	20	15	20	12:20	6:20	20	15	20	12:20
28 19th Avenue	5:57	10	12	10	20	12:53	5:57	12	12	20	12:53	5:57	12	12	20	12:53
29 Sunset	6:10	12	15	12	20	1:00	6:41	15	15	20	1:00	6:41	15	15	20	1:00

a/ All times are A.M. unless indicated otherwise.

Source: San Francisco Municipal Railway, San Francisco Street and Transit Map, June, 1984, and Muni Timetables, Summer, 1985, June 19, 1985.

III. ENVIRONMENTAL SETTING

East of the Buckingham Way four-way stop controlled intersection, Winston Drive has two westbound lanes and two eastbound lanes. West of Buckingham Way, Winston Drive has one westbound lane and one eastbound lane. Parking is permitted on both sides of Winston Drive west of Buckingham Way. East of Buckingham Way parking is permitted for approximately 100 feet in the eastbound direction and 200 feet in the westbound direction.

At the signalized intersection with Lake Merced Boulevard, the east leg of Winston Drive has three westbound lanes and two eastbound lanes. Winston Drive ends at Lake Merced Boulevard.

Buckingham Way loops around the project site, forming the site border on the north, west, and south. It is a private street, owned, controlled, and maintained by the developer of Stonestown Shopping Center. Parking is permitted along Buckingham Way, limiting traffic in each direction to one lane.

To the west of the four-way stop controlled intersection with Twentieth Avenue, Buckingham Way has one westbound lane and two eastbound lanes. East of Twentieth Avenue a parking lot aisle forms the fourth leg of the intersection. The intersection of Buckingham Way-Winston Drive is controlled by a four-way stop.

Twentieth Avenue is a north-south street located adjacent to the stores on the east side of the shopping center. Twentieth Avenue is not designated as either a major thoroughfare or a secondary thoroughfare in the Master Plan. From Eucalyptus Drive to the south portion of Buckingham Way, Twentieth Avenue is a private street owned, maintained, and controlled by the developer of Stonestown Shopping Center. Twentieth Avenue is a public street north of Eucalyptus Drive.

North of the Eucalyptus Drive four-way stop controlled intersection, Twentieth Avenue has one lane in each direction with parking permitted on both sides of the street. South of Eucalyptus Drive, Twentieth Avenue has two lanes in each direction. No parking is permitted on Twentieth Avenue south of Eucalyptus Drive.

At the four-way stop controlled intersection with Buckingham Way, two lanes are provided in each direction. South of Buckingham Way one lane is provided in each direction.

On the north leg of the Winston Drive four-way stop controlled intersection, Twentieth Avenue has two southbound lanes and one northbound lane. South of

Winston Drive, Twentieth Avenue has one lane in each direction.

Eucalyptus Drive is an east-west street north of the project site. It is not designated as either a major thoroughfare or a secondary thoroughfare in the Master Plan. Parking is permitted on both sides of Eucalyptus Drive.

At the four-way stop controlled intersection with Twentieth Avenue, the east leg of Eucalyptus Drive has one westbound lane and two eastbound lanes. West of Twentieth Avenue, Eucalyptus Drive has one lane in each direction.

Bicycles

Lake Merced Boulevard has been designated as a bicycle route in the Transportation Element of the City Master Plan. Lake Merced Boulevard is designated as a Class I Bikeway. It also is designated, along with Nineteenth Avenue, as a Preferred Commuter Bike Route.

Regional Transit

In addition to Muni service, noted above (Table 2, page 53), SAMTRANS serves the project area, with bus route 3B from Stonestown to the Daly City BART station and San Francisco International Airport. Route 3B provides service on 30-minute headways on weekdays from 6:00 A.M. to 6:00 P.M. and on weekends from 9:00 A.M. to 6:00 P.M.

Parking

There are 3,314 parking spaces on the site. These spaces include 2,636 spaces in lots and garages, 546 long-term spaces for employees and customers on the north and northwest sides of Buckingham Way near the theater, and 132 curb (on-street) parking spaces along Winston Drive and Buckingham Way.

Aerial surveys taken in 1979 and 1980 indicated that the parking was 90% to 95% occupied during an early afternoon hour on the Saturday after Thanksgiving. (This represents a design hour for parking in the shopping center industry.) Based on these surveys, the existing parking demand fully utilizes the existing capacity. ²⁹

²⁹ Typically, the Friday after Thanksgiving, not the Saturday, exhibits the greatest parking demand at shopping centers. However, weather conditions prohibited aerial surveys on the Friday after Thanksgiving in

III. ENVIRONMENTAL SETTING

The Planning Code contains specific off-street parking requirements for different categories of commercial and office use. ³⁰ The standard for retail space is one space per 500 square feet up to 20,000 square feet of occupied floor area plus one space per 250 square feet in excess of 20,000 square feet. The requirement for retail space devoted to bulky merchandise, such as automobiles, is one space per 1,000 square feet of occupied floor area (where the area exceeds 5,000 square feet). Medical and business offices have different off-street parking requirements: one space per 300 square feet (medical offices) and one space per 500 square feet (other businesses) where area exceeds 5,000 square feet. The Planning Code also defines the number and size of off-street freight loading bays to be provided. ³¹ Minimum dimensions are 35 feet long, twelve feet wide, and 14 feet high.

City Planning Commission Resolution No. 5490 stipulated that Stonestown Shopping Center must provide two square feet of parking area for every square foot of commercial floor area on the site. "Parking area" was defined as space dedicated to "automobile parking, automobile circulation, landscaping, and pedestrian circulation". ³²

Under existing conditions Stonestown has 1,025,035 square feet of gross floor area of commercial use on site which means that 2,050,070 square feet should be devoted to "parking areas". Stonestown has 1,394,400 square feet of area allocated to those uses which qualify as "parking area" as defined above.

both 1979 and 1980. More recent surveys of parking demand have not been made because Stonestown is not generating peak parking demand, due to vacancies. The survey day (Saturday) does represent peaking demand for the 20th highest hour of the year. This is the hour which is recommended as the demand hour upon which the design of shopping center parking facilities should be based. Wilbur Smith and Associates, Parking Requirements for Shopping Centers: Summary Recommendations and Research Study Report, Urban Land Institute, 1982.

Parking occupancy of 80% to 85% indicates "full utilization" of parking spaces. Because of frequent turnover and an occasional car parked in two spaces, 95% or 100% of the spaces in a parking lot seldom can be used. Therefore, when a lot is 80% to 85% filled, it is considered to be "fully utilized". Louis J. Pignataro, Traffic Engineering -- Theory and Practice, Prentice-Hall, 1973, page 268.

³⁰ City and County of San Francisco Planning Code, Article 1.5, Section 151, Table 4.

³¹ As revised by the San Francisco Planning Commission on January 21, 1982, Resolution No. 9286.

³² City Planning Commission Resolution No. 5490, January 25, 1962, page 2.

Pedestrian Facilities

Pedestrians can approach the site on sidewalks from all directions. From the north, Twentieth Avenue serves residents of the neighborhoods north of Stonestown and students who attend schools along Eucalyptus Drive. Pedestrians walking to and from the east can use Winston Drive which enables them to cross Nineteenth Avenue at a signalized intersection. South of the site pedestrians from medium and high density residential complexes and San Francisco State University can approach the site along several sidewalks, including the sidewalk along Nineteenth Avenue.

E. AIR QUALITY

San Francisco's persistent summer winds and upwind position with respect to major pollutant sources continue to give it what may be the cleanest air in the Bay Area. Despite these advantages, there are periods, usually in fall and winter, when the air becomes stagnant, and at these times the entire Bay Area has poor air quality. Table 3, page 58 shows the number of days the State and Federal standards were exceeded in the period 1982-1984. In 1984, two standards, the eight-hour Federal carbon monoxide (CO) and 24-hour State suspended particulate (TSP) standards, were exceeded on one day each. In 1983, the Federal one-hour ozone standard was violated once and the State 24-hour TSP standard, four times. In 1982, the Federal eight-hour CO standard was exceeded once and the State TSP standard, three times. For each pollutant, only the most stringent standard (Federal or State) is included in Table 3. The San Francisco monitoring station is located at 939 Ellis Street, about five miles northeast of the project site.

San Francisco's air quality is better than in most locations in the Bay Area, and State and Federal standards are not uniformly met in the Bay Area. This resulted in development of the 1979 Bay Area Air Quality Plan, a part of the Environmental Management Plan (EMP) prepared by the Association of Bay Area Governments (ABAG) and other governmental agencies.³³ The Bay Area Air Quality Plan was updated in 1982.³⁴ The 1982 Bay Area Air Quality Plan contains a comprehensive strategy for the long term attainment and maintenance of air quality standards. Included are measures to reduce emissions from stationary sources and automobiles and transportation

³³ Association of Bay Area Governments, 1979 Bay Area Air Quality Plan, Berkeley, California, January, 1979.

³⁴ Association of Bay Area Governments, 1982 Bay Area Air Quality Plan, Berkeley, California, 1982.

controls designed to meet Federal carbon monoxide and ozone standards in 1987.

TABLE 3
SUMMARY OF AIR QUALITY IN SAN FRANCISCO -- 1982-1984 a/

<u>Pollutant</u>	<u>Standard</u>	<u>Number of Days Exceeding Standard</u>		
		<u>1984</u>	<u>1983</u>	<u>1982</u>
Ozone	Federal One-Hour	0	1	0
Carbon Monoxide	Federal Eight-Hour	1	0	1
Nitrogen Dioxide	State One-Hour	0	0	0
Sulfur Dioxide	State 24-Hour	0	0	0
Total Suspended Particulates b/	State 24-Hour	1	4	3

a/ California Air Quality Data, Annual Summary, California Air Resources Board, 1983-1985.

b/ 24-hour samples are taken every sixth day.

F. EMPLOYMENT AND HOUSING

Total employment at Stonestown Shopping Center was 1,217 persons as of April, 1985 (see Table 1, page 20, and Appendix B, Table B-3, page A-32). Most employees (901 jobs or 74%) are retail workers, 71 people work in the mall mezzanine offices, 298 people are employed in medical building offices, and 18 are service personnel (security and gardeners). Additional seasonal employment results in a 20% to 50% increase in retail personnel. ³⁵

Retail vacancies have reduced on-site employment. Based on the number of people employed by the last tenants of now vacant shops, full occupancy of Stonestown's existing space would result in 1,243 retail jobs and a total

³⁵ This could result in 180 to 450 additional jobs under existing conditions (with vacancies) or 250 to 620 seasonal jobs with full occupancy of existing space. Existing employment (901 jobs) x 20% = 180 jobs; 901 x 50% = 450 jobs. Maximum employment (1,243 jobs) x 20% = 250 jobs; 1,243 x 50% = 620 jobs.

employment of about 1,560 people. ³⁶

Tenants rent space under various lease agreements. All office tenants have month-to-month leases. ³⁷ Commercial tenants whose leases have expired within the past five years rent space on a month-to-month basis. The Emporium, which leases its building, has a covenant with Stonestown to operate until October 30, 1987.

No housing is provided on the project site.

³⁶ This total assumes continued full occupancy and present employment levels of mezzanine and medical offices (298 total jobs) and of service employment (18 jobs). Full occupancy of retail areas would be expected to require additional service workers, although this increase in personnel has not been estimated.

³⁷ Idamay Brewster, Stoneson Development Corporation, telephone conversation, November 1, 1985.

IV. ENVIRONMENTAL IMPACTS

A. ISSUES NOT ADDRESSED

On April 20, 1984, based on an Initial Study, the Department of City Planning, Office of Environmental Review, determined that an Environmental Impact Report was required for the Stonestown Shopping Center renovation and expansion. Issues determined in the Initial Study to require no further environmental analysis include: land use compatibility, relocation, operational noise, air quality impacts during construction and impacts from odors/burning of material, utilities and public services, biology, geology/topography, water, hazards, and cultural resources. A copy of the Final Initial Study is attached to this report as Appendix A, page A-3.

Subsequent to the distribution of this Initial Study, comments were received from the California Archaeological Inventory recommending that potential project impacts on cultural resources be included in this EIR, and concerns were raised by nearby residents about operational noise. Therefore, this document does not discuss the issues noted above, except for cultural resources, operational noise, and information about office tenants displaced by mezzanine retail use.

Some of the issues presented in this chapter are not physical environmental impacts as defined under the California Environmental Quality Act. They are included in the EIR for informational purposes only.

B. LAND USE AND ZONING

Proposed amendments to the Master Plan and Planning Code are described in the Neighborhood Commercial Rezoning Study. The study recommends that the Stonestown site remain zoned C-2 (Community Business). The project would continue and intensify existing uses on the site in this C-2 district. Project uses would be compatible with the definition of the C-2 district in the Planning Code:

C-2 districts serve several functions... . They provide convenience goods and services to residential areas of the city, both in outlying sections and in closer in, more densely built communities. In addition, some C-2 districts provide comparison shopping goods and services on a general or specialized basis to a city-wide or a regional market area, complementing the main area for such types of trade in downtown San Francisco... . The emphasis is upon compatible retail

IV. ENVIRONMENTAL IMPACTS

uses, but a wider variety of goods and services is included to suit the longer term needs of customers and a greater latitude is given for the provision of automobile-oriented uses. ³⁸

The new department store would exceed the City's bulk limitations for that portion of the building over 40 feet high. An exception would be required to the City's bulk limits for that portion of the building. Between 40 feet and the 65-foot height limit, the maximum allowable building length is 110 feet and the maximum diagonal dimension 140 feet. The proposed department store's maximum building length above 40 feet would be 232 feet, and its maximum diagonal dimension would be 305 feet ³⁹, or 122 feet and 165 feet more than the maximum. The skylight enclosure over the mall (56 feet high) would have a total length of about 705 feet (without counting the flat roof between skylight segments) and a total diagonal dimension of about 720 feet -- 595 feet more than the maximum allowable length and 580 feet more than the diagonal dimension. (The skylights would be combined with 38-foot-high flat roofs.) The garage and mall shops would be 39 and 38 feet high, respectively, and thus would not be affected by the 40-foot and over bulk limitations. Exceptions to Planning Code bulk limits for the department store and mall skylights ⁴⁰ would be considered during the Conditional Use process.

The proposed project would add approximately 697,189 ⁴¹ square feet of gross floor area to the 1,259,854 square feet of existing gross floor area at Stonestown Shopping Center. Based on a site area of 1,971,090 square feet ⁴², the proposed total 1,957,043 square feet of gross floor area would be less than the 7,095,924 gross square feet allowable under the 3.6:1 maximum FAR in a C-2 district. ⁴³

Existing development at Stonestown covers 532,764 square feet (the total footprint of buildings). Based on the site area of 1,971,090 square feet, buildings cover about 27% of the entire site. The proposed building

³⁸ City and County of San Francisco Planning Code, Section 210.2, 1979 Edition, page 104.

³⁹ Approximately 61% of the proposed department store's roof area would be above the 40-foot height plane.

⁴⁰ Planning Code, 1979 Edition, Section 271, Bulk Limits: Special Exceptions, pages 139-140.

⁴¹ As defined by the San Francisco Planning Code, Sections 151, 152, 270, and 303(e). This square footage is the total difference between existing area (1,259,854 square feet) and proposed area (1,957,043 square feet).

⁴² Site size (45.25 acres) x 43,560 square feet per acre = 1,971,090 square feet.

⁴³ Site area (1,971,090 square feet) x 3.6 = 7,095,924 square feet.

footprint would cover 719,204 square feet or about 37% of the total site area.

C. URBAN DESIGN AND VISUAL QUALITY

The Urban Design Plan, an element of the Master Plan of the City and County of San Francisco, sets out principles and policies to guide major new development ⁴⁴, which may be used to evaluate the proposed project. A number of policies contained in the Urban Design Plan relate to the project area and the proposed project. Table 4, page 63 compares the project to these policies.

Photomontages showing the proposed project are presented in Figures 18, 19, and 20, pages 65 through 67 (see Figures 13, 15, and 16, pages 45, 47, and 48 to compare existing conditions with the proposed project). A photograph of a model showing a portion of the proposed enclosed mall is provided in Figure 21, page 68.

D. SHADOW AND WIND

Shadow

Existing shadows and additional shadows caused by the project are shown in Figures 22, 23, and 24, pages 69, through 72. The analysis was done for the first day of each season for 11 A.M., 1 P.M., and 3 P.M. local time. These times of day were selected to reflect impacts during the times of highest pedestrian use of the site. New shadow from the project is discussed below.

11:00 A.M. Depending upon the exact location of the proposed bus stop on the west side of the proposed department store (see Figure 22, page 69 for shadow diagram and Figure 26, page 87 for proposed relocation of bus stop), the bus stop could be shaded all year long at this time. The farther south the bus stop were located the less likely it would be to be shaded.

Portions of the sidewalk on the west side of the proposed department store would be shaded for nearly the entire length of the store, in varying degrees, with the greatest amount of shading in winter and the least in summer, as shown on Figures 22, 23, and 24. Sidewalks on the west of the proposed garage would be similarly shaded. During the spring, fall, and

⁴⁴ San Francisco Department of City Planning, Urban Design Plan, adopted by Resolution 6745 of the San Francisco City Planning Commission, August 26, 1971.

TABLE 4
RELATIONSHIP BETWEEN APPLICABLE URBAN DESIGN POLICIES
OF THE COMPREHENSIVE PLAN AND THE PROPOSED PROJECT ^{a/}

City Pattern, Policy 1:

"Recognize and protect major views in the City, with particular attention to those of open space and water" (page 10).

The proposed project would not obstruct any existing views in the City as seen from public areas.

Major New Development, Policy 1:

"Promote harmony in the visual relationships and transitions between new and older buildings" (page 36).

The physical layout, form, height, and massing of the proposed project, together with its construction materials, color, and landscape, are intended to be consistent with this policy (see Figures 18, 19, and 20, pages 65 through 67). Redevelopment of the mall buildings would extend the roofline planes of the larger anchor stores at the northern (Emporium) and southern (Bullock's) ends of the shopping center over the existing low, horizontal mall, intended to create a more unified scale and silhouette of development than now exists when seen from the east. The two-story buildings would have a single, contemporary appearance in contrast with the character of the existing shopping center architecture of the 1950s. Extending the mall across Winston Drive on two levels is intended to tie the separate shopping center elements together into a single complex more solidly than now achieved with the bridge connecting discrete buildings.

Major Development, Policy 6:

"Relate the bulk of buildings to the prevailing scale of development to avoid an overwhelming or dominating appearance in new construction" (page 37).

The design of the project is intended to unify the Stonestown development. The proposed new buildings would be similar in scale to existing department store buildings in Stonestown and larger in scale than surrounding development. The two-story mall would tie the two existing department stores together.

Major New Development, Policy 7:

"Recognize the special urban design problems posed in developments of large property" (page 40).

The location of Stonestown's major elements (the three department stores, new and existing garages, and two-story, enclosed mall) is intended to be functional and to produce desirable visual relationships from the interior and exterior of the project. The new department store and new parking garage would be located west of the existing buildings. These two major project elements would be developed by the future department store tenant. They have not been designed, and their urban design relationship to the rest of the project cannot be known at this time. New development -- primarily the department store and garage -- would be visible

^{a/} San Francisco Department of City Planning, Urban Design Plan, adopted by Resolution 6745 of the San Francisco Planning Commission, August 26, 1971.

--CONTINUED--

TABLE 4 -- CONTINUED

to residents of apartments west of the site. From the east, the two-story mall and skylight would block most views of the new department store and garage. On-site development would be intensified and generally would be concentrated adjacent to existing buildings. The deep setback from Nineteenth Avenue and its large surface parking areas would be retained, but the setback from the perimeter roads west of the site would be developed.

Neighborhood Environment, Principle 9:

"Open, unlandscaped parking areas are dull and unattractive and generally have a deleterious effect upon their surroundings" (page 45).

The existing parking areas of Stonestown Shopping Center lie approximately ten feet below the street level of Nineteenth Avenue, and views of the parking lots are partially screened by existing landscaping and development along the west side of Nineteenth Avenue. The parking lots remaining east and west of the shopping mall after development are proposed to be re-landscaped with trees, shrubs, and ground-cover as part of the project. A detailed landscape plan has not been prepared, however, and the amount, location, and type of landscaping are not known at this time. Some trees, including mature trees, would be removed with development of the department store, garage, and circulation modifications. On the west, development would occur within existing surface parking lots; some parking would remain.

Neighborhood Environment, Policy 12:

"Install, promote, and maintain the landscaping of public and private areas" (page 57).

The project would increase the amount of landscaping in interior and exterior areas, according to a landscape plan to be developed for the project.

Neighborhood Environment, Policy 13:

"Improve pedestrian areas by providing human scale and interest" (page 57).

The proposed two-story, glass-enclosed mall would provide shelter from the weather and about 81,673 square feet of interior pedestrian area on two levels. Benches, signage, lighting fixtures, colored paving patterns, and other interior elements would be included and coordinated (see Figure 21, page 68). Sidewalks would be maintained around the perimeter of the shopping center. On the east side of the mall, parking would be immediately adjacent to the sidewalk (compared with present conditions with Twentieth Avenue adjacent to the sidewalk).

Source: William Liskamm and Nichols-Berman



Figure 18. PHOTOMONTAGE - VIEW OF PROJECT FROM NINETEENTH AVENUE
LOOKING SOUTHWEST AT RENOVATED (EXPANDED MALL) AREA

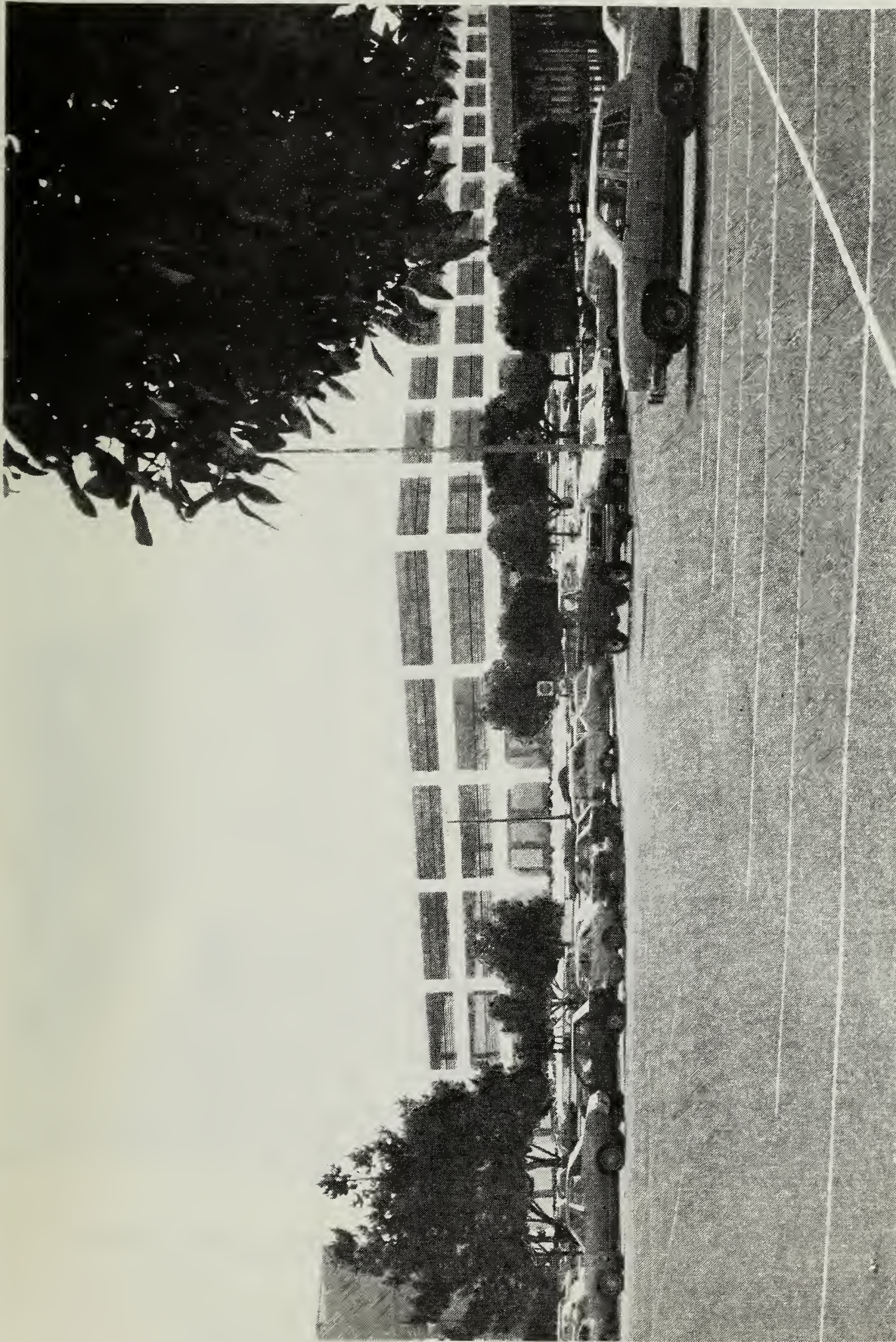
STONETOWN SHOPPING CENTER
RENOVATION AND EXPANSION



Figure 19. PHOTOMONTAGE - VIEW OF PROJECT FROM EXISTING GARAGE LOOKING
NORTHEAST AT NEW DEPARTMENT STORE (TO BE DESIGNED)

Note: The Department Store Montage illustrates the maximum building envelope.
The store has not been designed, and the montage is schematic.

STONE TOWN SHOPPING CENTER
RENOVATION AND EXPANSION



STONESTOWN SHOPPING CENTER
RENOVATION AND EXPANSION

Figure 20. PHOTOMONTAGE - VIEW OF PROJECT FROM NORTHWEST CORNER OF
SITE LOOKING SOUTHEAST AT PROPOSED GARAGE

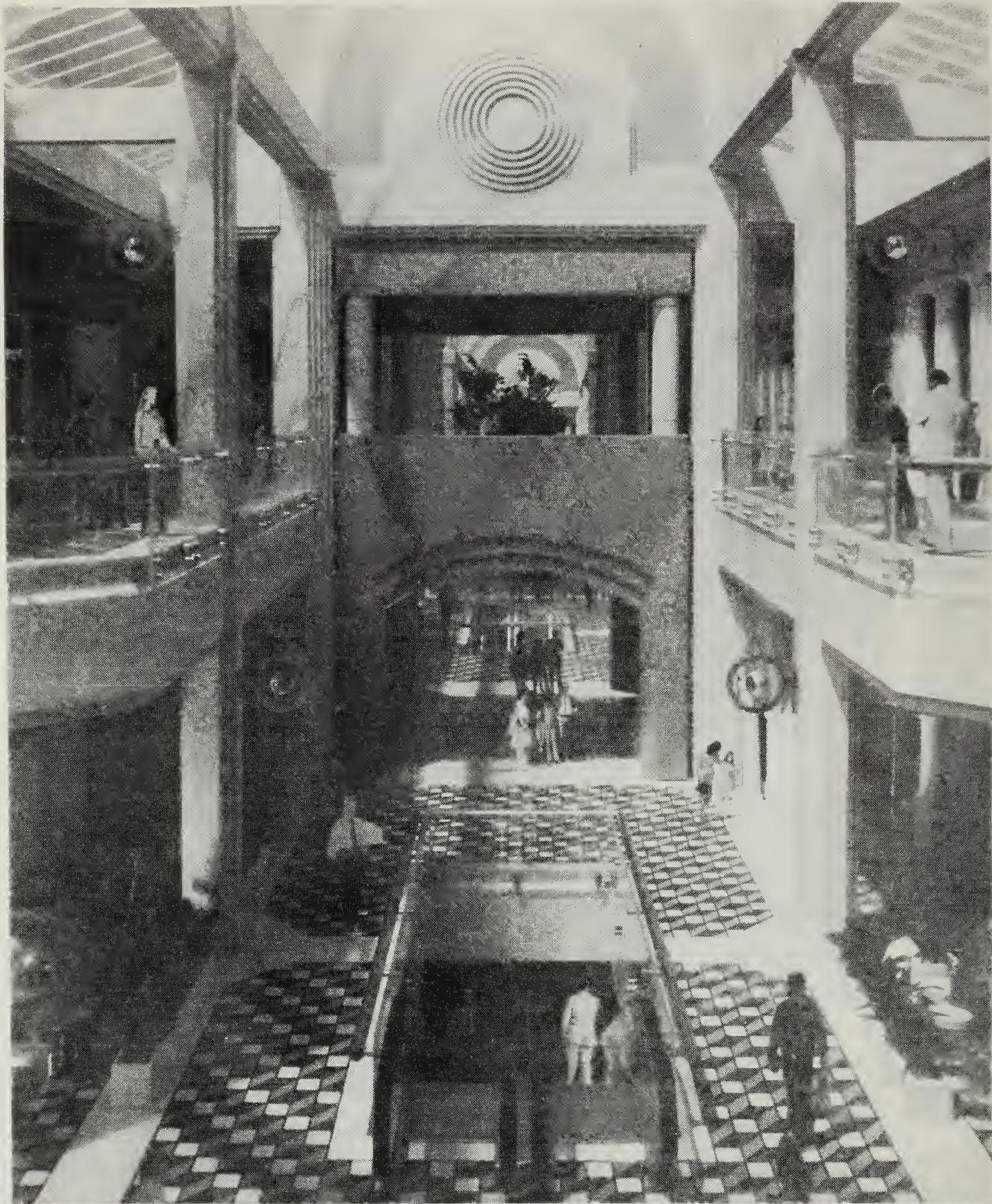
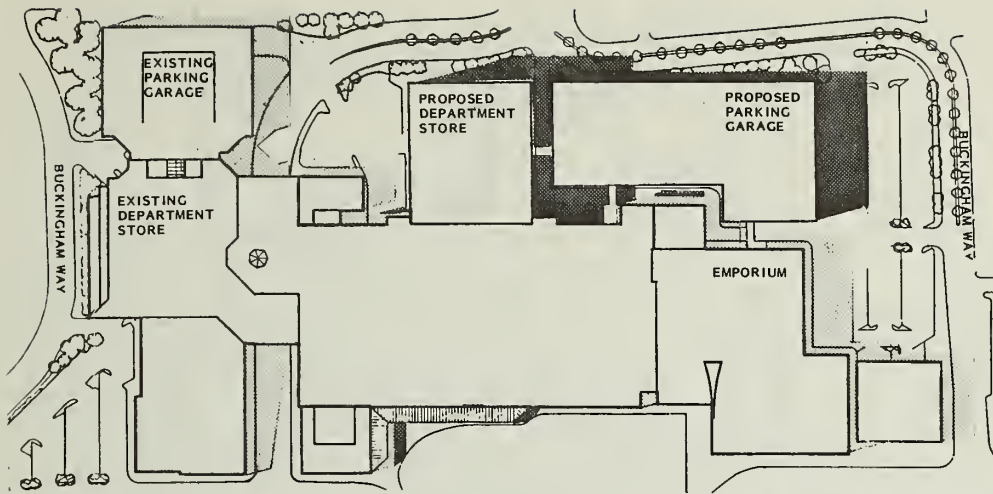
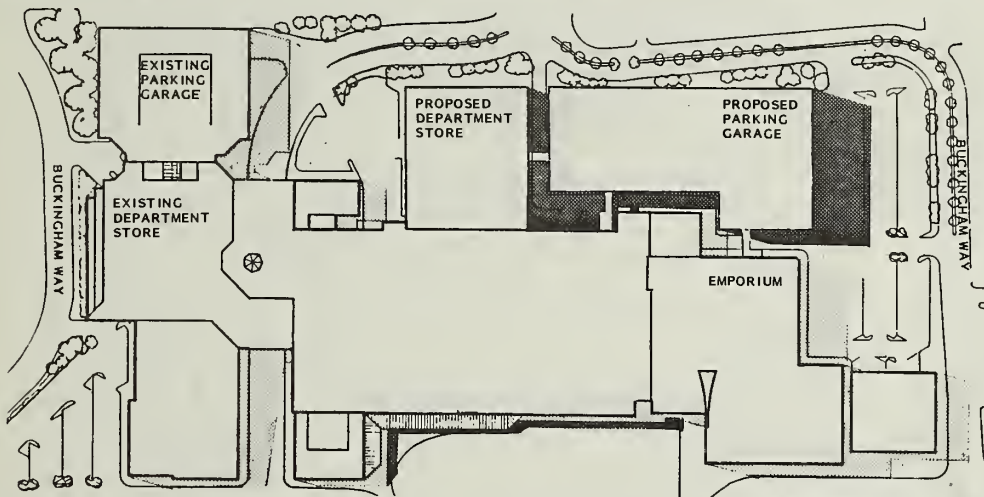


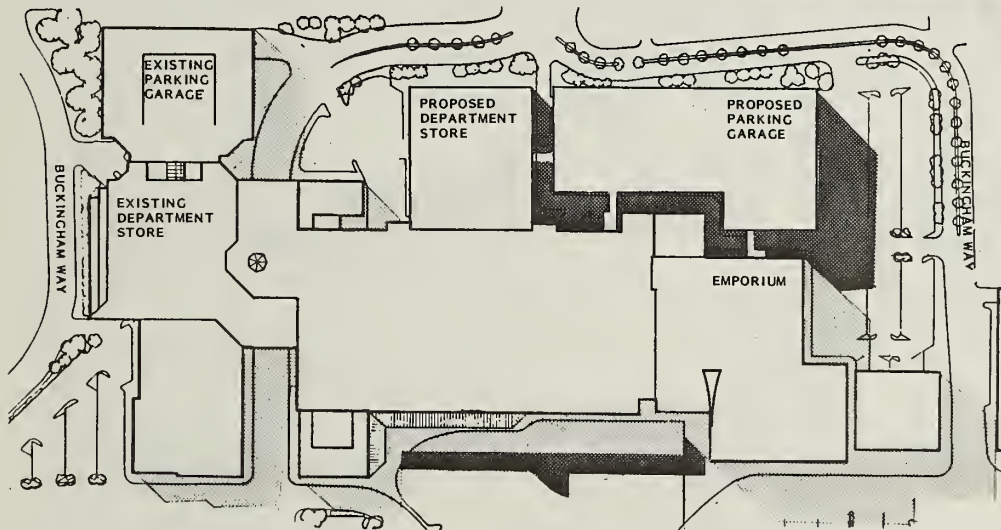
Figure 21. PHOTOGRAPH OF MODEL - PROPOSED ENCLOSED MALL



DECEMBER 21st - 11 a.m.



DECEMBER 21st - 1 p.m.



DECEMBER 21st - 3 p.m.

Figure 22. SHADOW PATTERNS: DECEMBER 21

NORTH →

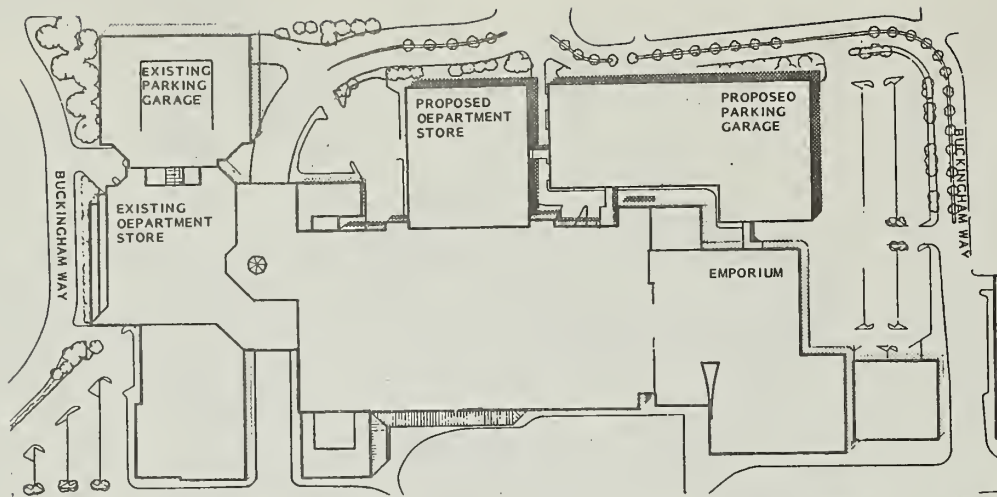
Existing Shadows

Proposed Project Shadows
(New Shadows Only)

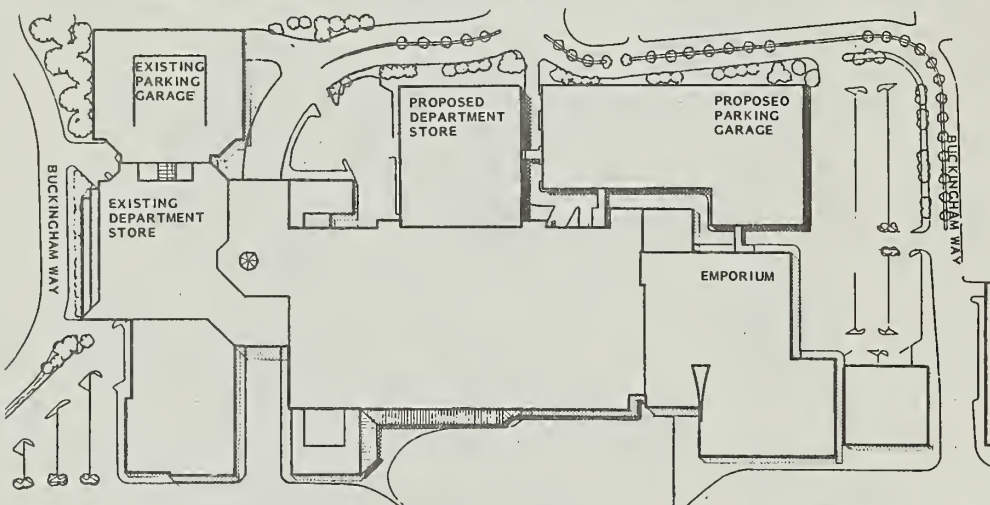
STONESTOWN SHOPPING CENTER
RENOVATION AND EXPANSION

Source: Don Ballanti, Certified Consulting Meteorologist -69-

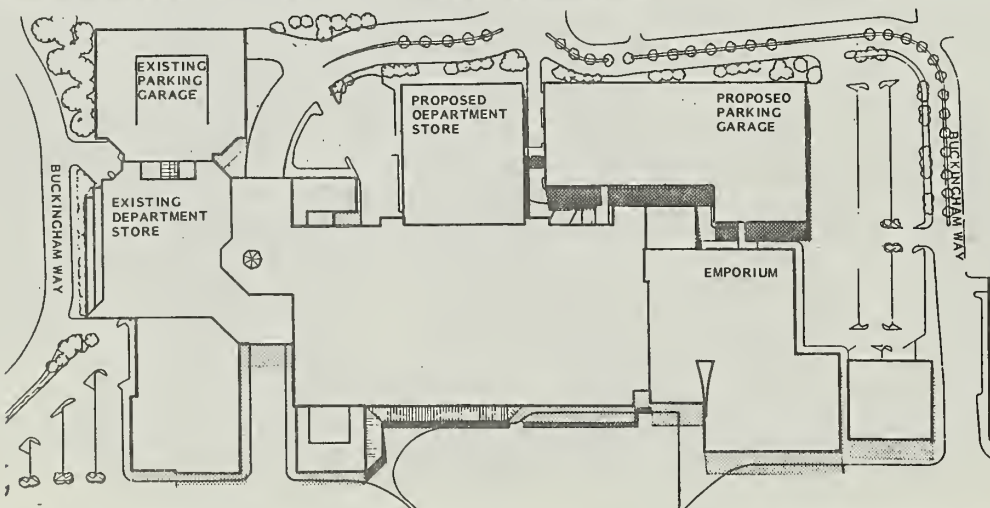
0 100 300 Ft.



JUNE 21st - 11 a.m.

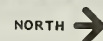


JUNE 21st - 1 p.m.



JUNE 21st - 3 p.m.

Figure 23. SHADOW PATTERNS: JUNE 21

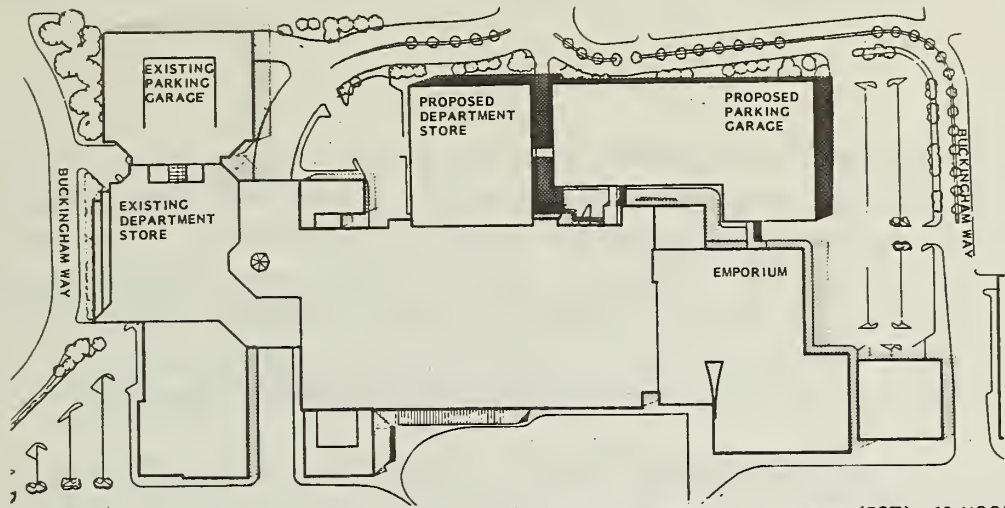


- Existing Shadows
- Proposed Project Shadows
(New Shadows Only)

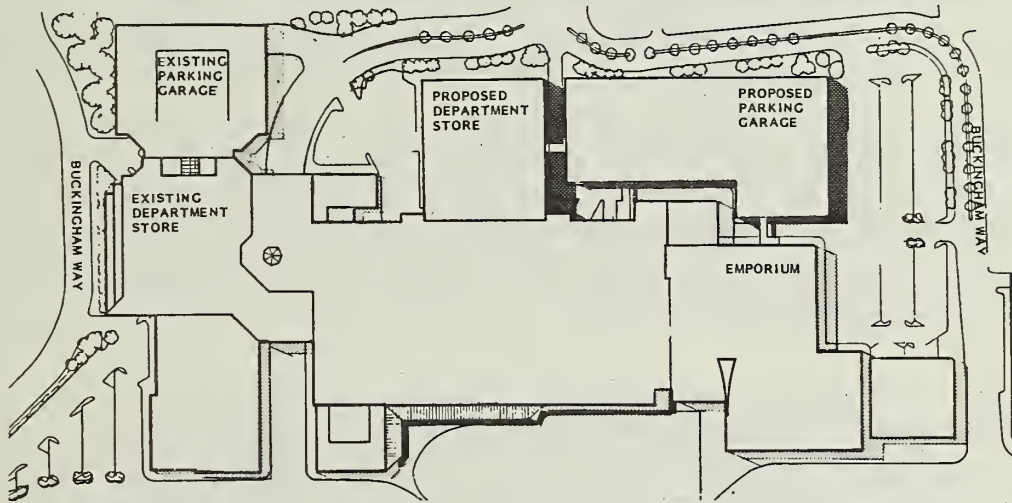
STONESTOWN SHOPPING CENTER
RENOVATION AND EXPANSION

Source: Don Ballanti, Certified Consulting Meteorologist -70-

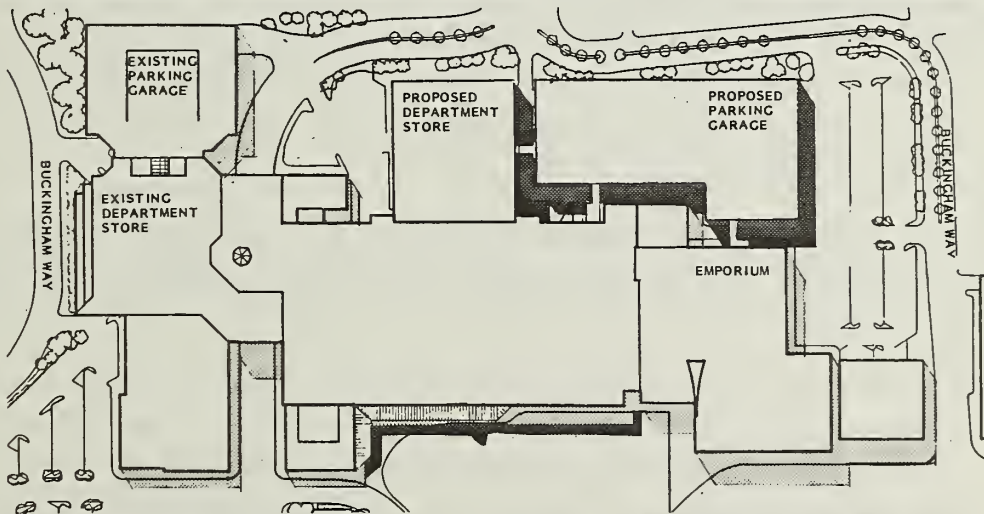
0 100 300 Ft.



MARCH 21st - SEPT. 21st - 11 a.m. (PST), 12 NOON (PDT)




MARCH 21st - SEPT. 21st - 1 p.m.(PST), 2 p.m. (PDT)



MARCH 21st - SEPT. 21st - 3 p.m. (PST), about 4 p.m. (PDT)

Figure 24. SHADOW PATTERNS: MARCH 21/SEPTEMBER 21



Existing Shadows
 Proposed Project Shadows
 (New Shadows Only)

STONESTOWN SHOPPING CENTER
 RENOVATION AND EXPANSION

Source: Don Ballanti, Certified Consulting Meteorologist -71-

0 100 300 Ft.

IV. ENVIRONMENTAL IMPACTS

winter the ground level area between the proposed department store and proposed parking garage would be in shade -- this area is proposed for service use and not as a pedestrian area. Pedestrians would use the first (mall) and second level walkways between the proposed parking garage and the shopping areas. In the winter approximately one-third of the parking area north of the proposed parking garage would be in shade, as would the southern part of the area between the proposed garage and the mall.

1:00 P.M. During the spring, fall, and winter the ground level between the proposed department store and the proposed parking garage would be in shade. During the winter this shade would extend the entire length of the proposed parking garage and the mall buildings. Also during the winter, the proposed parking garage would shade about one-half of the parking area to the north and the driveway immediately to the east. In March and September, project shadows here would extend over about one-fourth of the lot. During summer, shadows would be less, as shown on Figure 23, page 70. The existing buildings shade the sidewalk along the east side of the mall all year long. The proposed project would widen this shade along the sidewalk for the length of the mall all year long.

3:00 P.M. The ground level between the proposed department store and the proposed parking garage would be in shade in the spring, fall, and winter. The ground level between the proposed parking garage and the mall plus the Emporium building would be in shade all year long. The proposed parking garage would shade approximately one-half of the parking area to the north in the winter and less than ten percent of this area in spring, summer, and fall. Existing buildings shade the sidewalk along the east side of the mall all year long. The proposed project would extend this shade farther east into the parking area all year long.

Enclosure of the mall would reduce sunlight to that available through the proposed skylights. The project would not cast any shadow on any area outside of the site.

Wind

Changes in wind currents over the site would be negligible because of the low-rise nature of the project. ⁴⁵ Within the mall, wind would be

⁴⁵ Letter to Bill Liskamm from Donald Ballanti, Certified Consulting Meteorologist, May 8, 1985. A copy is on file and available for public review at the Department of City Planning, Office of Environmental Review, 450 McAllister Street, Sixth Floor, San Francisco.

IV. ENVIRONMENTAL IMPACTS

eliminated due to its enclosure.

E. TRANSPORTATION, CIRCULATION, AND PARKING

Demolition, Excavation, and Construction Traffic

During the construction period, transportation impacts would result from additional vehicle movements to and from the site, closure of Winston Drive for approximately five months during reconstruction, closure of lanes on Nineteenth Avenue for two to five months, and closure of lanes at the Twentieth Avenue-Buckingham Way intersection for three months.

During the peak two- to three-month construction period, approximately 150 workers' vehicles and 25 construction vehicles per day would travel to and from the site. With parking available due to store vacancies, workers' vehicles could be parked on-site. Mobile construction equipment, including, for example, trucks and front-end loaders, would cause some intermittent delay during their off-site travel.

The proposed lowering of Winston Drive would require closure of that street, from Twentieth Avenue to Buckingham Way, for approximately five months. During this period, pedestrian and vehicular traffic, including Muni bus Routes 17, 18, and 29 and SAMTRANS Route 3B, would need to be re-routed. This would increase traffic volumes on Twentieth Avenue and Buckingham Way and also would increase traffic delay.

The proposed new entrance-exit on Nineteenth Avenue and the new access road connecting with Buckingham Way would require use of two southbound lanes of Nineteenth Avenue (the parking lane and the through traffic lane closest to the curb) for approximately five months. This construction activity would delay southbound traffic. Construction of the proposed left-turn lane from northbound Nineteenth to the new entrance and access road would require closure of the northbound lane nearest to the median for approximately two months which would delay northbound traffic. These lane closures would reduce the capacity of Nineteenth Avenue at this point from 4,800 vehicles per hour (vph) to 3,200 vph. Existing peak hour volumes are 2,020 vph, including buses on Muni Route 28.

Construction of the proposed left turn pocket on northbound Nineteenth Avenue would result in shifting three northbound lanes one lane to the east. This would eliminate permanently approximately 35 unmarked curb spaces and a two-to three-car passenger loading zone along the east curb of Nineteenth

IV. ENVIRONMENTAL IMPACTS

Avenue from Rossmoor south to Winston Drive.

Muni Metro M-Line operations would not be disrupted by the new entrance construction activity, as work would proceed only when the tracks were clear. A temporary traffic signal or flagperson would be provided at this location to permit safe movement of construction vehicles and through traffic.

Realignment of the Twentieth Avenue-Buckingham Way intersection (within the site) would delay traffic using that intersection. Temporary lane closures would be required on each leg of the intersection. Circulation would be maintained at the intersection at all times through the use of barricades and flagpersons.

Other construction activity, such as building the ramp to underground parking, realignment of Twentieth Avenue, demolition of mall mezzanine and retail areas, building the new department store, parking garage, and mall would not cause off-site traffic impacts. Various areas on the site would be closed to pedestrians and vehicles at different periods. This would delay traffic in the shopping center. Circulation would be maintained on-site to allow access to the shopping center by pedestrians, autos, buses, and service vehicles.

Travel Demand from the Project

The Saturday peak (2:00 to 3:00 P.M.) is considered to be Stonestown's peak hour. However, the highest total concentration of traffic (i.e., site and through traffic) occurs on a weekday afternoon (5:15 to 6:15 P.M.). Thus, the weekday afternoon peak hour (5:15 to 6:15 PM) and peak period (4:45 to 6:45 P.M.) are used for analysis of transportation impacts in this report.

Travel demand estimates have been made for both "Average Day" and "Design Day" conditions in order to assure that the analysis accurately represents conditions likely to occur when travel patterns fluctuate, such as the Christmas shopping period or days of heavy student travel to SFSU. Design Day conditions represent the 20th highest day of the year such as would occur on a weekday in December. An Average Day would occur outside the heavier traffic periods of the year.

On an Average Day, the project would generate about 8,970 net new person trip-ends per day. Projected outbound (peak commute direction) P.M. peak period and peak hour trips by mode expected to be generated by the project

IV. ENVIRONMENTAL IMPACTS

are show in Table 5, page 76. About 740 new outbound person trips from the project would occur during the P.M. peak period of which about 370 would occur in the P.M. peak hour. ⁴⁶

On a Design Day, the project would generate 11,660 net new person trip-ends per day. Projected outbound P.M. peak period and peak hour person trip generation would be 900 and 445, respectively.

Cumulative Travel Demand

Proposed projects within the vicinity of the Stonestown site were identified in order to evaluate cumulative travel demand in the greater project vicinity. The only project which would have measurable effects on the transportation system is the possible expansion of San Francisco State University (SFSU) by 2,600 full time students (from 17,400 to 20,000 FTE students by the year 1995)(see pages 39-42, Land Use).

Approximately 230,213 square feet of gross leasable area were vacant on the project site as of July, 1985. ⁴⁷ Full occupancy of this vacant space would generate a total of 605 vehicle trips, 110 transit person trips, and 145 pedestrian trips during the P.M. peak hour.

Impacts of the Stonestown expansion in conjunction with downtown development would be negligible. Based on known, existing directions of patron approach and departure from Stonestown and the travel demand reported in Table 5, page 76, traffic from the project crossing the I-280 screenline would represent approximately 1.1 percent of total traffic, and transit volumes due to the project would represent less than one-tenth of one percent of total transit volume crossing the screenline. ⁴⁸

The following transportation analysis assumes the full occupancy of existing

⁴⁶ Buildout (1,149,571 square feet of gross leasable area) less existing (1,011,684 square feet) = 137,887 square feet of GLA. The transportation analysis uses gross leasable area to calculate trip generation for retail use, gross floor area to calculate trip generation for office use, and occupied floor area to calculate off-street parking and loading requirements. (See Appendix B, page A-30 for a comparison of area calculations.)

⁴⁷ Gross leasable area (230,213 square feet) versus gross floor area (225,775 square feet) of vacant area discussed in Chapter III, Land Use. The formula to convert gross leasable area to gross floor area, as defined by the City Planning Code, was developed by Field/Gruzen, the project architects.

⁴⁸ Downtown Plan EIR, EE81.3, Table IV.E.3, page IV.E.35.

TABLE 5
PROJECTED OUTBOUND TRAVEL DEMAND BY MODE FROM
STONESTOWN SHOPPING CENTER EXPANSION PROJECT
 (person trip ends)

<u>Travel Mode</u>	<u>Average Day</u>		<u>Design Day</u>	
	<u>P.M. Peak Period</u>	<u>P.M. Peak Hour</u>	<u>P.M. Peak Period</u>	<u>P.M. Peak Hour</u>
Auto	600	300	730	360
Transit	50	25	60	30
Walking	<u>90</u>	<u>45</u>	<u>110</u>	<u>55</u>
Total	740	370	900	445

Source: Barton-Aschman Associates, Inc., January 10, 1986.

Use Area: Retail -- 137,887 square feet of additional gross leasable area
 Office -- 13,703 square feet of existing office space to be eliminated with the project

Modal Split: Retail -- 81% Auto
 8% Transit
 11% Pedestrian
 Office -- 72% Auto
 28% Transit

Trip Generation

The sources for the trip generation rates used are: Institute of Transportation Engineers, Trip Generation, Third Edition, 1983. The daily trip rate for shopping centers over 500,000 gross square feet is 37.2 vehicle trips per 1,000 gross square feet of leasable area. The daily trip rate for general office building space is 12.3 vehicle trips per 1,000 gross square feet. These rates were converted to person trip rates using average vehicle occupancy rates of 1.8 persons per vehicle for shopping trips and 1.4 persons per vehicle for office trips. Modal trip rates for auto, transit, and pedestrian trips were determined using the modal split identified above. For a fuller explanation, refer to Appendix C, page A-33.

Barton-Aschman research has indicated that expansions of regional shopping centers typically generate trips at a rate lower than the existing retail space. However, the trip rate discount was not applied because this expansion is small in comparison with the total existing center (i.e., a 137,887-square foot expansion of an 1,011,684-square foot existing center represents only a 13.6% increase in gross leasable area) and because calculating the trip rate at the rate for existing retail space would be the conservative approach. Calculations on file with the Department of City Planning show that the difference between discounted and non-discounted trip generation rates is not large enough to affect traffic impact results or required mitigation measures.

Peak Hour and Period:

P.M. Peak Hour is 5:15 to 6:15 P.M.
 P.M. Peak Period is 4:45 to 6:45 P.M.

Note: all trips rounded to nearest five.

IV. ENVIRONMENTAL IMPACTS

Stonestown space, additional trips generated by the proposed project, and the potential SFSU expansion.

Local Intersection Traffic

Existing traffic volumes at seven intersections in the project area were obtained in July, 1985. ⁴⁹

The P.M. peak hour vehicle trips generated by the project, full occupancy of Stonestown, and cumulative development in the study area were assigned to the road network based on Stonestown directions of approach and departure. ⁵⁰ These assignments were modified based on the location of the proposed parking at Stonestown. (The resulting turning movement volumes for the P.M. peak hour are on file with the Department of City Planning. ⁵¹)

Average Day and Design Day capacity calculations were performed at the three existing signalized intersections (Nineteenth Avenue-Eucalyptus Drive, Nineteenth Avenue-Winston Drive, and Winston Drive-Lake Merced Boulevard) plus the location of the proposed new entrance on Nineteenth Avenue. In addition, capacity calculations were performed at the four existing unsignalized intersections controlled by four-way stop signs (Buckingham Way-Winston Drive, Twentieth Avenue-Winston Drive, Twentieth Avenue-Buckingham Way, and Twentieth Avenue-Eucalyptus Drive). The capacities were calculated for the following conditions:

- Existing conditions (1985).
- Future conditions (1995) including full occupancy at Stonestown and cumulative development but not including the proposed shopping center expansion.
- Future conditions (1995) with full occupancy at the existing facilities

⁴⁹ Counts performed by Barton-Aschman Associates, Inc., Wednesday July 31, 1985, between 3:00 and 5:45 P.M. These counts are available for review at the Office of Environmental Review, Department of City Planning, 450 McAllister Street, 6th Floor, San Francisco, California.

⁵⁰ Shopping center directions of approach and departure based on Stonestown shoppers surveys performed by Stoneson Development Corporation, 1973, and Barton-Aschman Associates, Inc., vehicle counts in 1976, 1979, and on July 31, 1985.

⁵¹ Available for review at the Office of Environmental Review, Department of City Planning, 450 McAllister Street, 6th Floor, San Francisco, California.

IV. ENVIRONMENTAL IMPACTS

at Stonestown and cumulative development, completion of the project (Stonestown renovation and expansion), and the proposed intersection and entrance on Nineteenth Avenue midway between Winston and Eucalyptus Drives.

- Future conditions (1995) with full occupancy of the existing facilities at Stonestown and cumulative development, completion of the project (Stonestown renovation and expansion), but without the proposed intersection and entrance on Nineteenth Avenue.

The calculations of intersection capacity use weekday P.M. peak hour (5:15 to 6:15 P.M.) traffic volumes because this period represents the worst case condition at the intersections. ⁵²

In order to analyze the operational efficiency of the signalized intersections, the Intersection Capacity Utilization (I.C.U.) method was used. The basic I.C.U. methodology involves the calculation of volume/capacity ratios for each of the critical movements at the intersection. From this information, traffic signal use can be determined, including allowance for yellow clearance. Thus, the total percentage of available capacity which would be used by the intersection volume is determined. The capacity calculation worksheets are on file with the Department of City Planning. ⁵³

The intersection capacities are shown in Table 6, page 79 and are described in terms of "level of service" (LOS). Levels of service range from "A" to "F", with level of service "A" indicating free flowing conditions while level of service "F" represents jammed conditions with consequent volumes at less than capacity due to jamming. (Levels of service are defined in Appendix C, page A-38.)

Table 6, page 79 shows that the Nineteenth Avenue-Winston Drive intersection

⁵² Although the peak hour for shopping centers typically is on Saturday afternoon, this is not the peak hour for adjacent city streets. Street traffic generally has A.M. and P.M. peaks on weekdays. Since Stonestown Shopping Center does not generate traffic during the A.M. peak hour (7:00 to 8:00 A.M.), the P.M. peak hour (5:15 to 6:15 P.M.) is used to determine the heaviest or worst case period for intersection capacity analyses. The impact of Saturday traffic also was measured, but the incremental project impact on Saturday was such that no intersection levels of service would be affected by the project.

⁵³ Available for review at the Office of Environmental Review, Department of City Planning, 450 McAllister Street, 6th Floor, San Francisco, California.

TABLE 6
SUMMARY AVERAGE DAY LEVEL OF SERVICE

<u>Intersection</u>	<u>Existing</u>		<u>Future (1995)</u>		<u>Future (1995) With</u>		<u>Future (1995) With</u>	
	<u>V/C a/</u>	<u>LOS b/</u>	<u>V/C</u>	<u>LOS</u>	<u>V/C</u>	<u>LOS</u>	<u>V/C</u>	<u>LOS</u>
<u>Signalized</u>								
● 19th-Winston	0.77	C	0.85	D	0.84	D	0.87	D
● 19th-Eucalyptus	0.84	D	0.92	E	0.95	E	0.95	E
● 19th-New Access Road	-	-	-	-	0.69	B	-	-
● Lake Merced-Winston	0.66	B	0.73	C	0.76	C	0.76	C
<u>Unsignalized</u>								
● 20th-Buckingham	0.41	A	0.51	A	0.65	B	0.56	A
● 20th-Eucalyptus	0.54	A	0.66	B	0.73	C	0.73	C
● 20th-Winston	0.52	A	0.58	A	0.55	A	0.67	B
● Buckingham-Winston	0.60	B	0.73	C	0.81	D	0.81	D

SUMMARY DESIGN DAY LEVEL OF SERVICE

<u>Signalized</u>								
● 19th-Winston	0.83	D	0.91	E	0.92	E	0.95	E
● 19th-Eucalyptus	0.87	D	0.96	E	0.98	E	0.98	E
● 19th-New Access Road	-	-	-	-	0.72	C	-	-
● Lake Merced-Winston	0.70	B	0.77	C	0.81	D	0.81	D
<u>Unsignalized</u>								
● 20th-Buckingham	0.48	A	0.59	A	0.72	C	0.67	B
● 20th-Eucalyptus	0.61	B	0.73	C	0.81	D	0.81	D
● 20th-Winston	0.63	B	0.69	B	0.65	B	0.77	C
● Buckingham-Winston	0.70	B	0.83	D	0.93	E	0.93	E

Source: Barton-Aschman Associates, Inc., December 29, 1985.

a/ Volume/Capacity (with "capacity" calculated at Level of Service E -- i.e., a V/C ratio of 1.00 means that 100% of the intersection's capacity is utilized).

b/ Level of Service.

IV. ENVIRONMENTAL IMPACTS

Average Day level of service would decline from LOS "C" to "D" in the future without the project and would remain at LOS "D" with the addition of project generated traffic, with or without the new access road.

Intersection operation is one level of service lower on a Design Day (Table 6, page 79).

The Nineteenth Avenue-Eucalyptus Drive intersection level of service would decline from LOS "D" currently to LOS "E" in the future, with or without the project and with or without the new access road and on both Average and Design Days.

The Nineteenth Avenue-new access road intersection would operate at LOS "B" in the future with the project on an Average Day and LOS "C" on a Design Day.

The Lake Merced-Winston Drive intersection level of service would decline from LOS "B" to "C" in the future without the project and would remain at LOS "C" with the addition of project generated traffic, with or without the new access road. On a Design Day, the addition of project traffic would cause the intersection to operate at LOS "D".

The Twentieth Avenue-Buckingham Way intersection Average Day level of service would remain at LOS "A" in the future for all existing and future conditions analyzed except one. In the future with the project and with the new access road, intersection level of service would decline from "A" to "B". Under Design Day conditions, the addition of project traffic would result in LOS "C" operation with the new access road and LOS "B" without the new access road.

The Twentieth Avenue and Eucalyptus Drive intersection Average Day level of service would decrease from LOS "A" to "B" in the future without the project. With the project, the level of service at this intersection would change from LOS "B" to "C", with or without the new access road. Under Design Day conditions, the intersection level of service would decrease to LOS "D" with the addition of project traffic, with or without the new access road.

The Average Day level of service at the Twentieth Avenue-Winston Drive intersection would decrease from LOS "A" to "B" with the project without the new access road. Under Design Day conditions, the intersection would operate at LOS "B" for existing, future without project, and future with project with a new access road. Without the new access road, the intersection would operate at LOS "C" on a Design Day.

IV. ENVIRONMENTAL IMPACTS

The Buckingham Way-Winston Drive intersection Average Day level of service would decline from LOS "B" to "C" in the future without the project. The intersection level of service would decrease from LOS "C" to "D" with the addition of project generated traffic, with or without the new access road. Under Design Day conditions, the existing LOS "B" would decline to LOS "D" without the project. With the project, with or without the new access road, the intersection would operate at LOS "E". (See page 118 for a mitigation measure which would be implemented in the event that level of service falls below LOS "C".)

Except for Twentieth Avenue-Buckingham Way and Twentieth Avenue-Winston Drive, the level of service at all intersections analyzed would remain the same in the future with the project, with or without the new access road. At the Twentieth Avenue-Buckingham Way intersection, the Average Day level of service would improve from LOS "B" to LOS "A" if the new access road were not built. At the Twentieth Avenue-Winston Drive intersection, the Average Day level of service would decline from LOS "A" to "B" if the new access road were not built. All four of these level of service operations would be one level lower under Design Day conditions.

The Nineteenth Avenue-Winston Drive intersection would be LOS "D" on an Average Day and level of service "E" on a Design Day in the future with the project, whether or not the new access road were built. The volume-to-capacity ratio at this intersection would be 0.84 (Average Day) and 0.92 (Design Day) with the project and with the new access road; the volume-to-capacity ratio would be 0.87 (Average Day) and 0.95 (Design Day) with the project but without the new access road.

Traffic signal warrant analyses were conducted on the four unsignalized intersections within the site. Such analyses indicate whether or not the traffic volumes at an unsignalized intersection would be sufficiently large to meet Warrant 1 of the California Manual on Uniform Traffic Control Devices. (Traffic signal warrants are designed to indicate traffic conditions where installation of a traffic signal should be considered. They do not require such installation. The minimum vehicular volume warrant -- or Warrant 1 -- is intended for application where the volume of intersecting traffic is the principal reason for consideration of traffic signal installation.)

The warrant analyses are summarized in Table 7, page 82 and are on file with

TABLE 7
TRAFFIC SIGNAL WARRANT ANALYSIS FOR UNSIGNALIZED INTERSECTIONS a/

<u>Intersection</u>	<u>Current (1985) Traffic Volumes b/</u>	<u>Future (1995) Traffic Volumes Without Project b/</u>	<u>Future (1995) Traffic Volumes With Project b/</u>
● 20th-Buckingham	Warrant Not Met; Signal Not Justified	Warrant Not Met; Signal Not Justified	Warrant Not Met; Signal Not Justified
● 20th-Eucalyptus	Warrant Not Met; Signal Not Justified	Warrant Not Met; Signal Not Justified	Warrant Not Met; Signal Not Justified
● 20th-Winston	Warrant Not Met; Signal Not Justified	Warrant Not Met; Signal Not Justified	Warrant Not Met; Signal Not Justified
● Buckingham-Winston	Warrant Not Met; Signal Not Justified	Warrant Not Met; Signal Not Justified	Warrant Met; Signal May Be Justified

Source: Barton-Aschman, Associates, Inc., December 29, 1985.

a/ The satisfaction of a warrant is not necessarily justification for signals. Delay, congestion, confusion, or other evidence of need for right-of-way assignment must be shown.

b/ Based on Average Day shopping center traffic levels.

the Department of City Planning.⁵⁴ The analyses indicate that existing volumes are not heavy enough to warrant consideration of a traffic signal at any of the four unsignalized intersections. Nor would future (1995) traffic volumes (with cumulative development and full occupancy of the existing shopping center) be heavy enough to warrant consideration of installation of a traffic signal at any of the four intersections. Future (1995) traffic volumes with cumulative development, full occupancy of existing Stonestown facilities, and the project would be heavy enough to warrant consideration of a traffic signal at the Buckingham Way-Winston Drive intersection.

Transit Operations

Transit ridership would increase by approximately 110 P.M. peak hour trips as a result of full occupancy of the existing facilities at Stonestown. Two hundred sixty (260) P.M. peak hour trips would be associated with the expansion of San Francisco State University. The proposed project would add about 50 P.M. peak hour transit trips. Total transit trips for future conditions (full occupancy of existing space, cumulative development, and the project) would increase by 420 trips during the P.M. peak hour.

The transit routes serving Stonestown include four Muni bus routes (17, 18, 28, and 29) and the Muni Metro M Line (see Figure 25, page 84). These transit lines collectively provide about 56 vehicular trips from Stonestown during the P.M. peak hour. The 420 additional P.M. peak transit patron trips would add an average of about 7.5 additional persons per vehicle to these 56 vehicle trips. Of this total, 0.9 additional persons per vehicle would result from the project.

Based on Muni passenger loading surveys conducted in the Spring, 1984⁵⁵ and field observations conducted in July, 1985⁵⁶, it was determined that available transit seating capacity for these five Muni lines ranges from six percent available (or 94% full) on the southbound M Line to 91% available (or nine percent full) on southbound Route 18 during the P.M. peak period. This available capacity indicates that approximately 1,483 seats are available for transit riders on the five transit routes in the Stonestown

⁵⁴ Available for review at the Office of Environmental Review, Department of City Planning, 450 McAllister Street, 6th Floor, San Francisco, California.

⁵⁵ As reported by Bonnie Nelson, Muni Scheduling and Traffic Department, telephone conversation, August 5, 1985.

⁵⁶ Barton-Aschman Associates, Inc., field observations conducted on Wednesday, July 31, 1985, between 3:00 and 5:45 P.M.

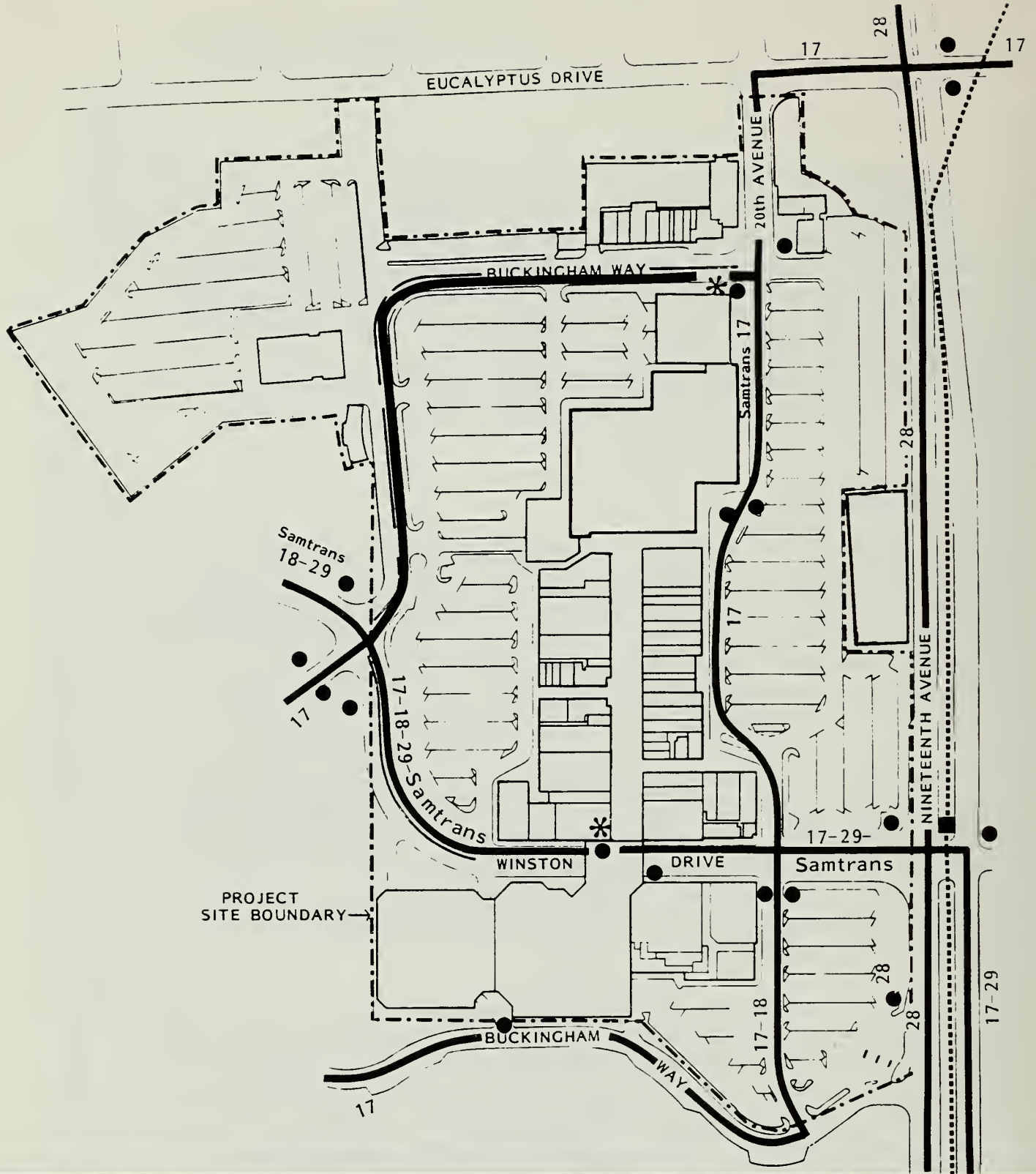


Figure 25. EXISTING TRANSIT SERVICE

- * Samtrans Bus Stop
- Muni Bus Stop
- Bus Routes
- Metro Stop
- Metro M Line



STONESTOWN SHOPPING CENTER
RENOVATION AND EXPANSION

area during the P.M. peak hour. The P.M. peak hour transit service analysis is summarized in Table 8, page 86. The 160 additional P.M. peak hour transit trips directly attributable to Stonestown and the 260 trips attributable to SFSU expansion could be accommodated by the 1,483 available transit seats on the five lines serving Stonestown, assuming that the direction of approach for transit riders is similar to the directional distribution of auto patrons to the shopping center.

Based on the proposed realignment of Twentieth Avenue and the reconstruction of Winston Drive (described below under Access and Internal Circulation, page 95), changes in bus stop locations are proposed in order to provide service to the new department store and mall stores. The proposed location of bus stops as well as the location of existing stops are shown in Figure 26, page 87. Changes would include relocation of five existing stops and the addition of one new stop. These changes are described below:

- The two existing stops near the Emporium would be moved east on either side of the realigned Twentieth Avenue. The relocated stops would be located approximately 25 feet farther away from a shopping center entrance than the present stops.
- The bus stop on the southwest corner of Twentieth Avenue and Buckingham Way is proposed to be moved to the northwest corner of the same intersection. This would facilitate access to the medical offices, post office, and other development north of Buckingham Way; it would increase the walk of department store users by about 50 feet.

The San Francisco Traffic Engineering Division has expressed concern regarding this bus stop relocation because the buses would stop in a right turn lane projected to accommodate 320 vehicles per hour on an Average Day. However, if the bus stop remains in its present location, the bus would be stopping in a through lane projected to carry 330 vehicles per hour (with the project and the new access road).

- The existing Muni and SAMTRANS stops near the at-grade pedestrian crossing on Winston Drive (near the mall sidewalk and main entrance to the former Bullock's store) would be relocated to the northeast and southeast corners of Twentieth and Winston. These stops would result in an increased walking distance of about 175 feet for transit users.
- A new stop would be installed near the entrance to the proposed new department store on the westbound side of Winston Drive, east of Buckingham Way. This stop would result in a walking distance from bus

TABLE 8
P.M. PEAK HOUR TRANSIT SEAT CAPACITY ANALYSIS

<u>Route</u>	<u>Direction</u>	<u>Estimated Number of Vehicles a/</u>	<u>Estimated Seat Capacity b/</u>	<u>Passengers Per Seating Available c/ (percent)</u>	<u>Estimated Available Seat Capacity d/</u>	<u>Level of Service e/</u>
17	SB/NB Loop Route	6	288	62%	179	B
18	NB	4	192	62%	119	B
18	SB	4	192	91%	175	C
28	NB	6	288	4%	12	A
28	SB	6	288	48%	138	A
29	NB	5	240	24%	58	A
29	SB	5	240	45%	108	A
M	NB	10	1,360	45%	612	A
M	SB	10	1,360	6%	82	A
					<hr/>	
		56	4,448		1,483	

Source: Barton-Aschman Associates, Inc., August 14, 1985.

a/ The estimated number of vehicles is determined from average headways during the P.M. peak hour.

b/ Estimated seat capacity is based on 48 seats per bus and 136 seats per Muni Metro train.

c/ Estimated available seating is based on Muni passenger loading data for Spring, 1984. Estimated Metro seat capacity available is based on field observations from 4:30 to 6:45 P.M. on Wednesday, July 31, 1985 by Barton-Aschman Associates which were adjusted by a factor of 1.6 based on comparison of observed bus loadings on July 31, 1985 with Spring, 1984 data.

d/ Estimated available seat capacity is determined by applying the estimated percentage of seat capacity available to the estimated seat capacity.

e/ City of San Francisco, Department of City Planning, Downtown Plan EIR, page J.36.

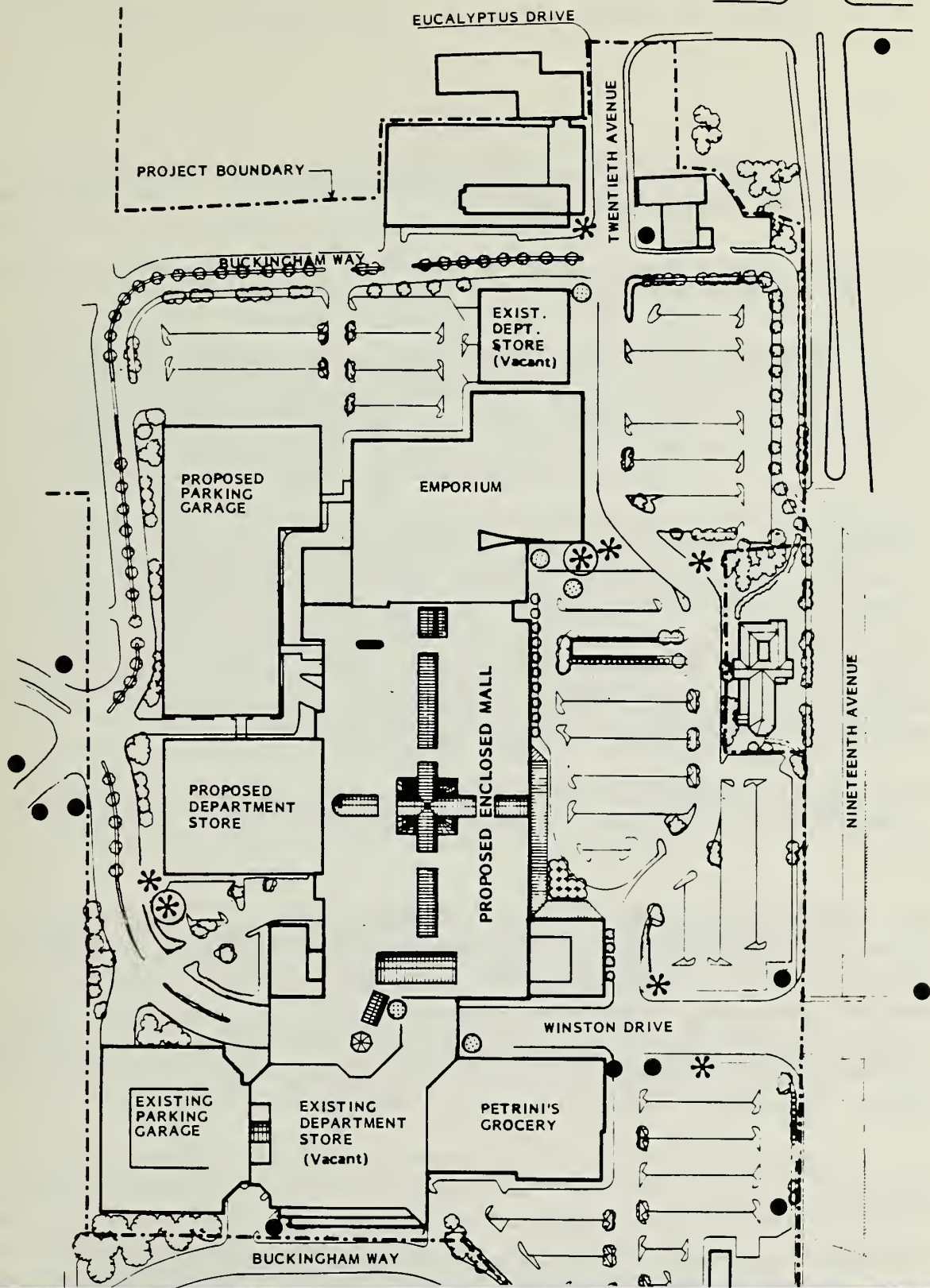


Figure 26. PROPOSED LOCATION OF BUS STOPS

- Existing Stop to Remain
- ⊙ Existing Stop to be Removed
- * New Muni Stop
- ⊙* New Samtrans Stop

Source: Barton-Aschman Associates, Inc.

STONESTOWN SHOPPING CENTER
RENOVATION AND EXPANSION

0 100 200 Ft.



stop to store entrance similar to what exists today at the Winston Drive mall sidewalk bus stop.

The precise location and approval for these bus stop changes will be made by Muni prior to their relocation.

The Municipal Railway is especially concerned about the project's potential impacts in the vicinity of Nineteenth Avenue between Winston Drive and Eucalyptus Drive. Operational studies in conjunction with the Municipal Railway's intended J-Church connection project have indicated a need for a turnback facility for use as a terminal in this vicinity. This project, which will extend the J-Church Muni Metro service from Thirtieth and Church south along San Jose Avenue, and to San Francisco State University and Stonestown, also will provide new direct service from the Mission District to Stonestown and thereby support the development. It presently appears that the needed Muni facilities would not seriously conflict with the new entrance proposed by the project. However, additional detail design work is necessary to ensure compatibility between the Muni's and Stonestown's needs, and it appears some redesign work will be necessary.

The turnback is expected to require 675 feet from the southern tip of the existing M-Ocean View loading platform on Nineteenth Avenue at Winston Drive.

Muni believes a design can be mutually developed which can accommodate Stonestown's proposed left turn lane and entrance off northbound Nineteenth Avenue while still not interfering with the proposed J-Church terminal turnback operations. (Stonestown's present design leaves 630 feet between Winston Drive and the new proposed roadway.) Muni staff is willing to work with the project's architects and engineers to assist in designing an entrance acceptable to both the developers and Muni. ⁵⁷

Parking

The project would result in a total of 4,470 parking spaces (4,338 off-street and 132 on-street spaces) on site through construction of a new garage (780 net new spaces), conversion of the mall basement to parking (350 spaces), and restriping surface parking areas (220 spaces). The proposed parking would be a 1,156-space increase over the existing on-site parking supply (3,314 spaces) -- 35% more spaces than under existing conditions. Of

⁵⁷ K. L. (Dan) Wong, Muni Planning Staff, letter, December 20, 1985.

the 4,338 off-street spaces, up to 1,420 spaces (33%) would accommodate compact cars, and 2,918 spaces (67%) would accommodate standard size cars. Parking would be provided as follows (see Table 9, page 90):

- The mall basement would be converted to a 350-space parking garage. A maximum of 40% of spaces (140 spaces), as allowed by the Planning Code, would be for compact cars. A ramp would be built from the existing parking lot to the basement garage. Due to the slope of the site, the proposed basement parking area would be at grade with the western parking areas and would be connected to the new driveway serving the proposed parking garage on the west side of the site.
- A 1,040-space parking garage would be built in the surface parking lot west of the existing mall and north of the proposed department store, replacing 260 existing surface spaces. The garage would have 260 spaces per level (ground plus three stories) for a net increase of 780 spaces. Approximately 416 spaces would be for compact cars. Vehicular access would be provided at grade to the basement level from Buckingham Way (via a new driveway). (Two new pedestrian bridges would connect the garage with the first and second floors of the department store proposed to the south. Two other new pedestrian bridges would connect to the east: one would provide access to the mall area while the other would connect directly with the existing Emporium building.)
- The surface parking lots would be restriped following modification of the on-site circulation network and proposed building construction. Proposed restriping would add 220 new parking spaces.

Development of the proposed new department store would eliminate 194 existing spaces. On-site, on-street parking on Winston Drive and Buckingham Way would be unchanged (132 spaces).

As noted, approximately 35 off-site spaces on Nineteenth Avenue would be removed with construction of the proposed new entrance to the site. The removal of these spaces will be reviewed by the Department of Public Works as part of the approval process for the new access road. The loss of these spaces (between Winston Drive and Rossmoor Drive) would not affect the parking supply used by Stonestown shoppers and employees, as these spaces are less convenient for shopping center users than on-site parking. Based on limited data, it appears that these spaces are used by long-term parkers at schools and other employment centers located elsewhere along the Nineteenth Avenue corridor, such as San Francisco State University (see Appendix C, page A-39). The spaces would be lost to these users. No homes

TABLE 9
STONESTOWN PARKING

<u>Area</u>	<u>Existing</u>	<u>Proposed Change</u>	<u>Proposed Project</u>
Surface Lots	2,512		2,278
● Loss from New Department Store Building Pad		-194	
● Loss from New Parking Garage Building Pad		-260	
● Gain from Restriping		+220	
Existing Parking Structure	670		670
New Parking Structure	-	+1,040	1,040
Basement of Mall	-	+350	350
<u>Total Off-Street Spaces</u>	<u>3,182</u>	-	<u>4,338</u>
On-Street Spaces (on-site)	132	-	132
<u>TOTAL ON-SITE PARKING</u>	<u>3,314</u>	<u>+1,156</u>	<u>4,470</u>

Source: Barton-Aschman Associates, Inc., August 2, 1985.

face these spaces.

Parking demand at Stonestown Shopping Center previously has been observed to be 90% (1979) and 95% (1980) of available parking supply for the design hour during the peak Christmas season.⁵⁸ These peak occupancies translate into parking demand ratios of 3.4 spaces and 3.6 spaces per 1,000 square feet of gross leasable area, respectively. Other nationwide studies of shopping center parking demand have observed higher parking ratios of 4.4 spaces⁵⁹ and 4.9 spaces⁶⁰ per 1,000 square feet of gross leasable area at centers similar in size to Stonestown.

The 1980 actual design day parking demand at Stonestown was used to estimate the amount of on-site parking needed to serve the project. The proposed project would experience a design day parking demand of 3,604 spaces⁶¹, based on historical experience at Stonestown.

Since a parking facility is deemed to be "fully used" when it reaches 80% to 85% of its actual capacity⁶², it would be necessary to provide 4,240 parking spaces on-site in order to adequately accommodate a design day demand of 3,604 automobiles (i.e., 3,604 parked vehicles divided by 0.85). In this case, based on past experience at Stonestown, 4,240 parking spaces would be needed to meet project parking demand.

If national averages for shopping center design day parking were applied to Stonestown, the project parking demand would be higher than that given above. A recent national publication on shopping center parking supply recommends 5.0 spaces per 1,000 square feet for shopping centers the size of Stonestown.⁶³ At 5.0 spaces per 1,000 square feet, the shopping center would require a parking supply of 5,005 spaces after the expansion.

⁵⁸ Barton-Aschman Associates, Inc., aerial surveys, 1979 and 1980. Also see Footnote 29, page 55, for a discussion of design hour.

⁵⁹ Institute of Transportation Engineers, Parking Generation (An Interim Report), Land Use Code 823, 1985.

⁶⁰ Wilbur Smith and Associates, Parking Requirements for Shopping Centers: Recommendations and Research Study Report, Urban Land Institute, 1982. This report made several conclusions regarding the relationship between shopping center parking supply and demand: (1) peak period parking demand is not related to the amount of parking available, (2) an increase in the available parking supply does not lead to a corresponding increase in parking demand, and (3) supply does not induce demand. (See pages 9 and 33 of the ULI report.)

⁶¹ 1,001,074 square feet x 3.6 spaces per 1,000 square feet.

⁶² See Footnote 29, page 55 (transportation setting section).

⁶³ Wilbur Smith and Associates, Parking Requirements for Shopping Centers: Recommendations and Research Study Report, Urban Land Institute, 1982.

IV. ENVIRONMENTAL IMPACTS

Since Stonestown is a regional shopping center within a central city, rather than in a suburban location, more shoppers could be expected to arrive by modes other than auto, and, as noted, the demand based on national averages (which include suburban centers) probably overstates the demand at Stonestown, as indicated by historical experience at Stonestown. As reported on Table 5, page 76, approximately 19% of Stonestown shoppers do not arrive by auto but use transit (eight percent) or walk (11%). The Wilbur Smith and Associates study on parking requirements⁶⁴ found that adjustment to parking requirement rates should be made for centers when more than 25% of all persons arrive by modes other than auto. That study examined 135 shopping centers and developed parking standards for centers in which approximately 85% to 95% of visitors arrive by auto. The modal split of Stonestown indicates a large percentage of non-auto arrival but not large enough to warrant adjustment to the parking demand rates.

Table 10, page 93 compares the proposed parking supply with the parking demand calculated using both historical Stonestown experience and national averages. The proposed parking supply of 4,470 spaces would be ten spaces more than the Design Day parking demand calculated as noted above and 1,166 spaces more than the Planning Code requirements.

The City Planning Code contains parking requirements for various types of land uses.⁶⁵ Those requirements relevant to the project are shown in Appendix C, page A-43. Stonestown (existing and proposed development) would be required by the Planning Code to have 3,304 parking spaces; a total of 4,470 spaces are proposed on-site. This total includes 4,338 off-street spaces (subject to the Code requirement) and another 132 on-street spaces (which would remain unchanged by the project and not affected by Code requirements). The total parking supply of 4,470 spaces thus would exceed the Code required number of off-street spaces (3,304 spaces) by 35% or 1,166 spaces. A Conditional Use Permit is required to allow parking in excess of 150% of the required number of spaces; no Conditional Use Permit would be required for the proposed parking supply which would result in 135% of the Code requirement for off-street spaces.

City Planning Commission Resolution No. 5490 requires two square feet of parking area for every one square foot of commercial usage on site. The Stonestown Shopping Center, with the project, would contain 1,317,480 square feet of commercial area (gross floor area). CPC Resolution 5490 requires

⁶⁴ Ibid.

⁶⁵ Planning Code, op. cit., Section 150.

TABLE 10
ESTIMATED PARKING SUPPLY REQUIREMENTS a/

	Proposed Parking Supply	Design Day Parking Demand Using Historical Stonestown Experience	Design Day Parking Demand Using National Averages
Retail Uses <u>b/</u>	4,250	4,240	5,005
All Other Uses <u>c/</u>	220	220	220
<u>Total</u>	<u>4,470</u>	<u>4,460</u>	<u>5,225</u>

Source: Barton-Aschman Associates, Inc., November 21, 1985.

a/ These supply estimates are derived from parking demand generation rates for a peak hour on a Saturday during the Christmas shopping season. This hour represents the 20th highest hour of parking demand for the year. The 20th highest hour is recommended as the demand hour upon which the design of shopping center parking facilities should be based. Wilbur Smith and Associates, Parking Requirements for Shopping Centers: Summary Recommendations and Research Study Report, Urban Land Institute, 1982.

b/ Retail uses include 1,001,074 square feet of gross leasable area.

c/ The "all other uses" category includes the following buildings: Standard Oil, Grand Auto, Imperial Savings and Loan, theater, administration building, and medical office building. These buildings provide a total of 148,497 square feet of gross leasable area.

Parking demand rates from the following source were applied to each land use: Institute of Transportation Engineers, Parking Generation (An Interim Report), 1985, Land Use Code 823. The numbers in the table represent the sum of the individual land use parking demand estimates.

IV. ENVIRONMENTAL IMPACTS

that the project project on-site parking area of 2,634,960 square feet. The project would contain the following "parking area" elements:

297,200 square feet, automobile circulation (exclusive of public streets)
125,115 square feet, landscaping
184,480 square feet, pedestrian areas

606,480 square feet, total

A total of 2,028,480 square feet (2,634,960 square feet less 606,480 square feet) should be provided under the category of automobile parking. This would result in a total on-site parking supply of 5,795 spaces (2,028,480 divided by 350 square feet per space).

As proposed, the project includes 1,941,010 square feet of parking area, resulting in an on-site supply of 4,470 spaces.

The project application would request a modification of this requirement as part of the conditional use process.

Pedestrian Flows

Detailed travel surveys and pedestrian directions of approach were taken in 1961 and 1973. ⁶⁶ Based on these travel surveys, the major directions of approach for pedestrians were found to be from the north, south, and east. From the north, most pedestrians were found to enter the shopping center along Twentieth Avenue. Students who attend schools along Eucalyptus Drive and residents of the neighborhoods north of Stonestown would enter Stonestown from this direction.

Pedestrians walking to and from the east concentrate at Winston Drive because the traffic signal enables them to cross Nineteenth Avenue and because of the concentration of transit stops there.

Pedestrian approaches to and from the south primarily relate to both San Francisco State University and the existing medium and high density residential uses along the south side of the site. Much of the pedestrian travel to and from the south is oriented to the Stonestown Market (Petrini's) at Twentieth Avenue and Winston Drive.

⁶⁶ Barton-Aschman Associates, Inc., "Transportation Impact Report, Proposed Stonestown Shopping Center Expansion," 1973.

Based on field observations and review of previous pedestrian surveys, pedestrian flows on all sidewalks adjacent to or on the site are at level of service "A" and would remain so with the project. ⁶⁷

The midblock pedestrian crossing of Winston Drive west of Twentieth Avenue (at the center mall under the existing Bullock's overpass) is a location where pedestrian/auto conflicts occur. In addition to Stonestown customers crossing Winston Drive, the crosswalk serves Muni and SAMTRANS patrons transferring between routes.

Access and Internal Circulation

The proposed project would change vehicular access and internal circulation from existing conditions in the following ways (see Figure 27, page 96):

- Construction of a new entrance/exit on Nineteenth Avenue, together with a new left-turn pocket and traffic signal on Nineteenth Avenue at this new intersection.
- Construction of a new access road connecting with Buckingham Way and Twentieth Avenue, realignment and reconstruction of the Buckingham Way-Twentieth Avenue intersection, and realignment of Twentieth Avenue between Buckingham Way and Winston Drive.
- Construction of a ramp entrance from Twentieth Avenue to new parking under the mall, construction of a new driveway entrance to the proposed parking garage near the Buckingham Way-Winston Drive intersection, and elimination of one driveway entrance from Buckingham Way to the former surface parking area which would be replaced by the proposed parking garage.
- Reconstruction of Winston Drive from Twentieth Avenue to east of Buckingham Way, elimination of the basement level service tunnel under

⁶⁷ Barton-Aschman Associates, Inc., field observation made on August 14, 1985 and pedestrian surveys reported in the Final Environmental Impact Report for Proposed Stonestown Shopping Center Renovation Project, certified October 14, 1976, Appendix C, and Environmental Impact Report Amendment for the Proposed Stonestown Shopping Center Renovation Project (EE77.324), certified by the Planning Commission (Resolution 8202), April 5, 1979. For pedestrian level of service definitions, see John J. Fruin, Pedestrian Planning and Design, Metropolitan Association of Urban Designers and Environmental Planners, Inc., 1971, pages 74-78.

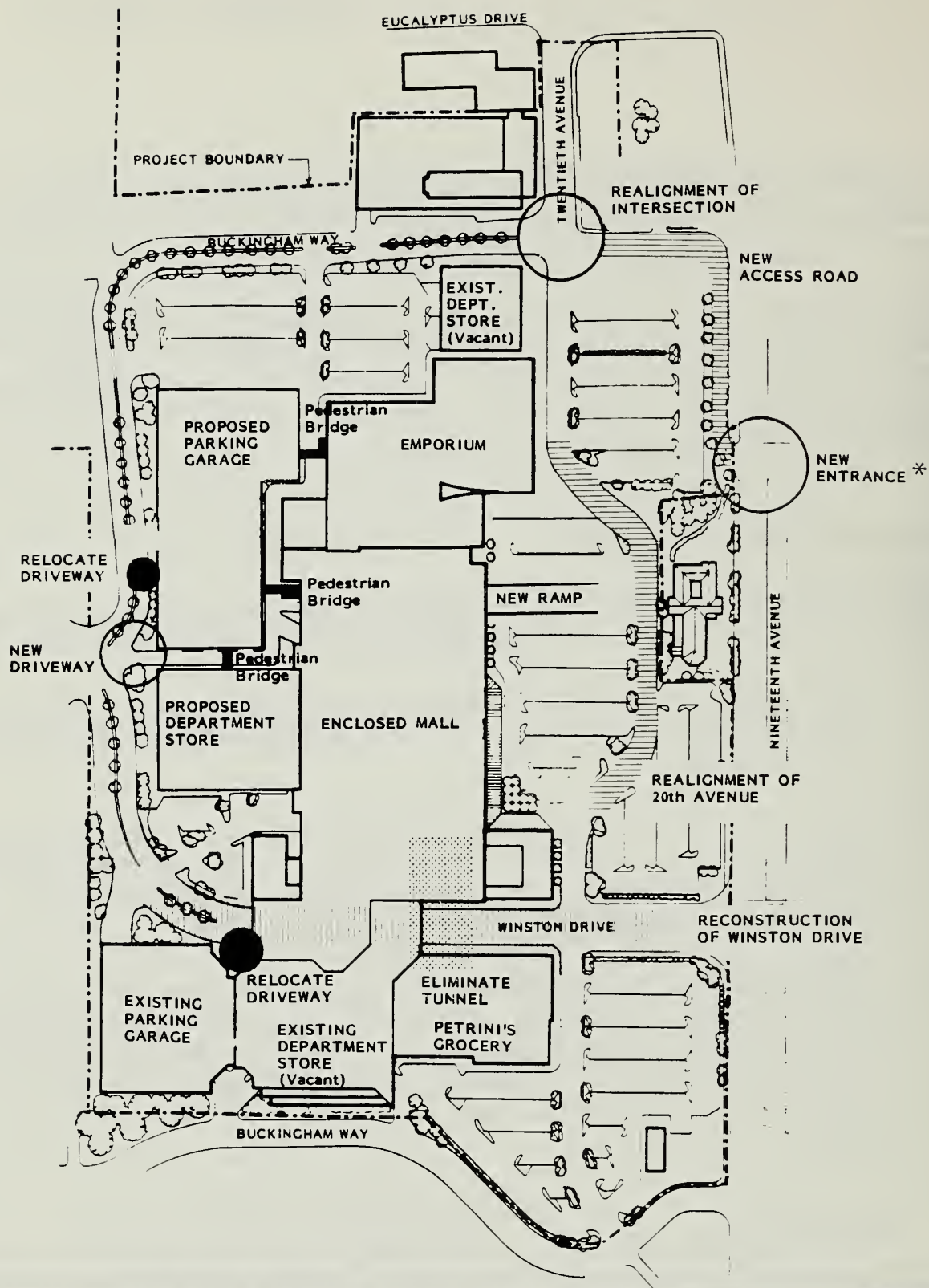


Figure 27. MODIFICATIONS TO VEHICULAR ACCESS

* The Project would add a left-turn pocket on Nineteenth Avenue northbound, for the new entrance. This would move the two travel lanes east one lane. Thirty - five existing curbside parking spaces would be eliminated by conversion of the curb lane from parking to a travel lane.



STONESTOWN SHOPPING CENTER
RENOVATION AND EXPANSION

IV. ENVIRONMENTAL IMPACTS

Winston Drive which connects the loading area under the mall stores with the loading area under the former Bullock's store and grocery market building, and elimination of the eastern garage entrance on Winston Drive.

These modifications to vehicular access and internal circulation are described below.

A new entrance to the site would be built on Nineteenth Avenue between the intersections of Winston Drive and Eucalyptus Drive with Nineteenth Avenue immediately north of the Temple Baptist Church. The entrance would provide right-turns out of the site onto Nineteenth Avenue southbound and left-turns into the site for drivers traveling northbound on Nineteenth Avenue. A left-turn pocket would be provided on northbound Nineteenth Avenue adjacent to the Muni Metro right-of-way, and a traffic signal would be installed at the proposed new intersection. The signal would enable Muni Metro's Light Rail Vehicles (M Line) to override it so as to have the right-of-way over cars turning left at this intersection. The proposed signal would not delay LRVs more than the existing light rail crossover, which stops northbound traffic on Nineteenth Avenue to allow M-Line LRVs to cross between the median and the light rail tracks to the east of Nineteenth Avenue. Thus, the existing six-minute headways during the peak periods on the Muni Metro M Line could be maintained. Left turns from Nineteenth Avenue into the shopping center now occur only at the Nineteenth Avenue-Winston Drive intersection. The project would add a left turn pocket on Nineteenth Avenue for the new entrance. This would move the three northbound travel lanes one lane to the east. Approximately 35 unmarked, curbside parking spaces between Rossmoor and Winston Drive would be eliminated by conversion of the curb lane from a parking lane to a travel lane.

A new access road would connect to the new entrance on Nineteenth Avenue. This road would parallel Nineteenth Avenue for approximately 330 feet north where it would turn west for another 240 feet. This road would become the east leg of the Twentieth Avenue-Buckingham Way intersection. The access road would be two lanes wide (one travel lane in each direction) from the proposed Nineteenth Avenue entrance to the Twentieth Avenue-Buckingham Way intersection where a third lane would be provided for left-turns onto southbound Twentieth Avenue. The new road would provide access to the proposed parking garage on the west side of the site, via Buckingham Way.

The Twentieth Avenue-Buckingham Way intersection would be realigned so that the new access road would align with Buckingham Way. Although this intersection presently is a three-way "T" intersection, it operates as a

IV. ENVIRONMENTAL IMPACTS

four-way intersection with the fourth leg being the parking lot aisle on the east. Changes to the Twentieth Avenue-Buckingham Way intersection would include: constructing the east leg (new access road) to provide a left-turn lane, widening on the west leg (Buckingham Way) to provide a through lane, and adding a right-turn channel on the south leg (Twentieth Avenue) to facilitate right turns.

The new entrance and access road would reduce the projected number of left turns at the Nineteenth Avenue-Winston Drive intersection which would reduce congestion, although with or without the new entrance and access road, the level of service at the Nineteenth Avenue-Winston Drive intersection would be "D" in the future (1995). The volume-to-capacity ratio without the new entrance and access road would be 0.87 compared with 0.84 with the new entrance and access road (see Table 6, page 79).

Twentieth Avenue would be realigned and widened from two to three lanes (to become one lane in each direction plus a turning lane) from north of Winston Drive to south of Buckingham Way. About 720 feet of Twentieth Avenue now bordering the mall buildings would be moved approximately 225 feet east within the existing parking lot. The Twentieth Avenue intersections with Buckingham Way and Winston Drive would remain at their existing locations, but the roadway would curve away from the mall buildings into the parking lot and back to the mall buildings between the two intersections.

The area of the existing Twentieth Avenue would become a parking lot aisle. The reduction in vehicle volumes would reduce the potential for pedestrian-vehicle conflicts near the storefronts, with through traffic moved 225 feet east. The realignment of Twentieth Avenue would also eliminate the existing condition just north of Winston Drive, where Twentieth Avenue curves to the west and a parking lot aisle curves to the east (see Figure 27, page 96). The proposed project would eliminate this branching and would require both through traffic and parkers to use Twentieth Avenue. Parkers thus would enter and exit parking lot aisles and the ramp to the new mall basement parking lot by making right and left turns from Twentieth Avenue. With the widening of Twentieth Avenue from two to three lanes, automobiles would be able to pass stopped buses, and buses would be able to pass turning automobiles, reducing automobile-bus conflicts and improving vehicular flow.

A ramp would be built from Twentieth Avenue to the new parking area under the mall. This would provide access to additional parking from the east side of the site without requiring the use of Winston Drive or Buckingham Way. Should the east side surface parking area be full, additional parking

IV. ENVIRONMENTAL IMPACTS

under the mall would be accessible via this ramp.

A new entrance to the proposed parking garage on the west side of the site would be built near the Buckingham Way-Winston Drive intersection. Because the entrance would be so close to this intersection, it would be designed to restrict turns to right-in and right-out.

The south driveway entrance from Buckingham Way to the existing surface parking area would be eliminated. This driveway is located approximately 100 feet north of the Buckingham Way-Winston Drive intersection and serves the existing surface parking area to be replaced by the garage. Two other existing driveways from Buckingham Way to this surface parking area would be retained.

A 720-foot segment of Winston Drive would be reconstructed between its intersection with Twentieth Avenue and a point approximately 210 feet east of its intersection with Buckingham Way. The roadway would be excavated to lower its grade under the proposed mall level and the existing pedestrian bridge. The existing basement level service tunnel under the Winston Drive roadway would be demolished, and the eastern garage entrance on Winston Drive would be eliminated. (The western entrance would remain unchanged as would the Buckingham Way entrance on the south side of the existing garage.) The grade level pedestrian crossing of Winston Drive would be eliminated and replaced with the mall level pedestrian bridge at the same location.

Off-Street Loading Requirements and Demand

Off-street freight and service vehicle loading spaces would be reduced from 84 to 40 spaces; that is, the project would decrease loading on-site by 44 spaces. Four new locations for loading activity would be provided by the project. Off-street loading supply is summarized in Table 11, page 100.

The shopping center now has off-street loading spaces at four locations: mall basement (64 spaces), Emporium (seven spaces), former Bullock's (four spaces), and grocery building (nine spaces). The 20 spaces at these latter three locations would be retained. The 64 spaces in the mall basement (now used primarily by existing warehouses) would be eliminated by the proposed underground parking.

TABLE 11
OFF-STREET LOADING SUPPLY

<u>Area</u>	<u>Existing</u>	<u>Proposed Project</u>
Mall Basement	64 spaces	0 spaces
Emporium	7 spaces	7 spaces
Former Bullock's	4 spaces	4 spaces
Grocery Market Building	9 spaces	9 spaces
Basement Level <u>a/</u>	0 spaces	5 spaces
Mall level:		
• South of new store	0 spaces	5 spaces
• North of new store	0 spaces	4 spaces
Service Driveway <u>b/</u>	0 spaces	6 spaces
<u>TOTAL LOADING SPACES</u>	<u>84 spaces</u>	<u>40 spaces</u>

a/ Between new department store and garage.

b/ East of mall buildings.

Source: Barton-Aschman Associates, Inc., August 2, 1985.

Estimated demand for freight and service vehicle spaces is summarized in Table 12, page 101. Based on average trip generation rates for regional shopping centers, the proposed project would generate 300 daily truck trips, 50% of which would be in panel or pickup trucks or station wagons. (Each freight or service vehicle would generate two daily trips -- one inbound and one outbound.) The 300 daily truck trips would be made over a 12- to 14-hour period, peaking around midday. From 8:00 A.M. to 3:00 P.M., 72% of the inbound trips and 68% of the outbound trips would be expected to be made. Thus, about 15 to 20 vehicles would be expected during a peak hour. ⁶⁸ This volume of service vehicles could be accommodated by the 40 proposed loading spaces.

Off-street loading spaces required by the San Francisco Planning Commission Guidelines were calculated and are shown in Table 13, page 102. The proposed 40 spaces would exceed the Planning Commission Guideline requirement of 21 spaces by 19 spaces.

⁶⁸ in-house research summarized and published in Pasadena Retail Center Traffic Impact Report, Barton-Aschman Associates, July, 1976. A copy of this report is available for review at the Department of City Planning, Office of Environmental Review, 450 McAllister Street, Sixth Floor.

IV. ENVIRONMENTAL IMPACTS

TABLE 12
ESTIMATED SERVICE VEHICLE MOVEMENTS

<u>Estimated Daily</u> <u>Truck Trips</u> <u>a/</u>	<u>Existing</u>	<u>Proposed Project</u>
• Semi truck with trailer (2%) <u>b/</u>	5 trips	5 trips
• Single unit truck (48%) <u>b/</u>	125 trips	145 trips
• Panel/pickup truck or station wagon (50%) <u>b/</u>	130 trips	150 trips
<u>TOTAL TRIPS</u>	<u>260 trips</u>	<u>300 trips</u>

a/ Caltrans, Tenth Progress Report on Trip End Generation Research, 1975. Regional Shopping Centers generate 0.3 truck trips per 1,000 square feet of gross leasable area. Gross leasable area for existing conditions includes mall shops (311,075 square feet), Emporium (288,925 square feet), Joseph Magnin (35,417 square feet), former Bullock's store (148,170 square feet), and grocery market building (79,600 square feet) for a total of 863,187 square feet.

Gross leasable area for proposed conditions includes mall shops (298,962 square feet), proposed department store (150,000 square feet), Emporium (288,925 square feet), Joseph Magnin's (35,417 square feet), former Bullock's store (148,170 square feet), and the grocery market building (79,600 square feet) for a total of 1,001,074 square feet.

Each service vehicle would generate at least two trips -- one inbound and one outbound.

b/ In-house research summarized and published in Pasadena Retail Center Traffic Impact Report, Barton-Aschman Associates, Inc., 1976. A copy of this report is available for review at the Department of City Planning, Office of Environmental Review, 450 McAllister Street, Sixth Floor.

Note: All trips rounded to nearest five.

Source: Barton-Aschman Associates, Inc., August 2, 1985.

TABLE 13
OFF-STREET LOADING SPACE REQUIREMENTS

<u>Use</u>	<u>Rate</u> <u>a/</u>	<u>Existing</u>		<u>Proposed</u>	
		<u>GFA</u>	<u>Spaces</u>	<u>GFA</u>	<u>Spaces</u>
Retail	0.21 spaces/10,000 square feet of gross floor area (for areas over 50,000 square feet)	740,800 <u>b/</u>	16	1,003,820 <u>c/</u>	21
Offices and Banks	0.1 space/10,000 square feet of gross floor area	13,703 <u>d/</u>	1	0	0
<u>TOTAL</u>			<u>17</u>		<u>21</u>

a/ Guidelines adopted by the San Francisco City Planning Commission on January 21, 1982, Resolution No. 9286.

b/ Includes the following gross floor area: retail shops (202,782 square feet), Emporium (280,257 square feet), former Joseph Magnin's (34,354 square feet), former Bullock's (146,195 square feet), grocery market building (77,212 square feet) for a total of 740,800 square feet.

c/ Includes the following gross floor areas: retail shops (317,802 square feet), proposed department store (148,000 square feet), Emporium (280,257 square feet), former Joseph Magnin's (34,354 square feet), former Bullock's (146,195 square feet), and grocery market building (77,212 square feet) for a total of 1,003,820 square feet.

d/ Offices in the mall mezzanine.

Source: Barton-Aschman Associates, Inc., August 2, 1985.

IV. ENVIRONMENTAL IMPACTS

F. AIR QUALITY

Local Effects

The project would act as an indirect source of atmospheric emissions by generating automobile traffic. On the local scale, carbon monoxide (CO) is the most important pollutant emitted by automobiles. Projected carbon monoxide concentrations for existing conditions near the site and with the project were calculated using traffic volumes presented in the Transportation Impacts Section.

Details of the air quality model are contained in Appendix D, page A-44. Results for conservative meteorological conditions are summarized in Table 14, page 104. These concentrations represent the exposure a person would experience at curbside. Carbon monoxide levels would drop off rapidly with distance from curbside. Concentrations of carbon monoxide also would be elevated above background levels in and near the proposed parking garage, particularly on the ground floor (because all vehicles would pass through this floor and most idling would occur there). Concentrations in and near the garage have not been estimated because design details have not been finalized but would be expected to be lower than the "hot spot" levels shown in Table 14.

Table 14 shows that project-generated traffic would increase conservative carbon monoxide concentrations by as much as 0.1 parts per million for the one-hour and eight-hour averaging times. Carbon monoxide estimates were found to be the same for the project with or without the new access road. Neither the State one-hour standard of 20 ppm or the Federal eight-hour standard of 9.0 ppm would be exceeded on-site or in the project vicinity with or without the proposed project. There are two sensitive receptors for carbon monoxide near the project site. Lowell High School is located on Eucalyptus west of 19th Avenue, and Mercy High School is located on the east side of 19th Avenue across from the project site. Both schools are more than 500 feet from the intersections analyzed and, therefore, would have carbon monoxide concentrations lower than those shown in Table 14. The project would not violate carbon monoxide standards, thus would not have an adverse air quality effect on either school.

IV. ENVIRONMENTAL IMPACTS

TABLE 14
CURBSIDE CARBON MONOXIDE CONCENTRATIONS UNDER WORST-CASE CONDITIONS
(in parts per million)

<u>Intersection</u>	<u>Existing</u>		<u>1995 Without Project</u>		<u>1995 With Project</u>	
	<u>One- Hour</u>	<u>Eight- Hour</u>	<u>One- Hour</u>	<u>Eight- Hour</u>	<u>One- Hour</u>	<u>Eight- Hour</u>
19th-Eucalyptus	14.4	8.4	12.0	6.8	23.0	6.8
Winston-Buckingham	7.6	4.0	7.2	3.8	7.3	3.8
19th-Winston	14.8	8.6	12.3	7.0	12.4	7.1
Standards	20.0	9.0	20.0	9.0	20.0	9.0

Source: Donald Ballanti, Certified Consulting Meteorologist

Regional Impact

The regional impact of the project would be due to the increase in vehicle miles traveled (VMT) associated with the project. Based upon the estimate of project trip generation and an average trip length of five miles, the daily regional increase of VMT is estimated at 20,200. Using composite emission factors supplied by the California Air Resources Board and assuming an average trip speed of 20 miles per hour (mph), total regional emissions from project traffic have been estimated in Table 15, page 104. No measurable impact on regional air quality would be expected due to the quantities of pollutants which would be generated by the project in comparison with regional totals.

TABLE 15
REGIONAL AUTOMOBILE EMISSIONS
(in tons per day) ^{a/}

<u>Pollutant</u>	<u>1990 Project Emissions</u>	<u>1990 Regional Emissions</u>	<u>% Increase in 1990 Regional Emissions Due to Project</u>
Carbon Monoxide	0.52	2,300	0.02
Hydrocarbons	0.03	530	0.005
Oxides of Nitrogen	0.03	560	0.005

^{a/} Based upon an increase of 20,200 vehicle miles traveled per day.

Source: Donald Ballanti, Certified Consulting Meteorologist

G. ENERGY

Pacific Gas and Electric Company (PGandE) supplies energy to San Francisco customers. Electrical energy is generated from various sources including oil, gas, hydroelectric, geothermal, nuclear, wind, cogeneration, and solid waste. ⁶⁹ In future years PGandE expects to generate electricity from these sources and coal. The proportion of energy generated from oil and gas is expected to decrease by 1990 with corresponding increases in the proportion of energy generated from other sources listed above. ⁷⁰

Annual energy consumption by existing commercial, office, and parking uses on the site ⁷¹ is 31.6 million kilowatt hours (kWh) of electricity and 213,000 therms of natural gas, equal to about 331,332 million Btu at the source. ⁷²

Removal of existing structures would require an unknown amount of energy. Fabrication and transportation of building materials, worker transportation, site development, and building construction would require about 528 billion Btu of gasoline, diesel fuel, natural gas, and electricity. ⁷³ Distributed over the estimated 50-year life of this project, this would be about 10.5 billion Btu per year, or about 11% of the annual operating energy requirements of the new buildings.

New buildings in San Francisco are required to conform to energy conservation standards specified by Title 24 of the California

⁶⁹ Pacific Gas and Electric Company, Annual Report, San Francisco, California, 1982.

⁷⁰ Pacific Gas and Electric Company, Annual Report, San Francisco, California, 1981.

⁷¹ Operating energy assumptions are available for review at the Office of Environmental Review, Department of City Planning, 450 McAllister Street, Sixth Floor, San Francisco, California.

⁷² The British thermal unit (Btu) is the quantity of heat required to raise the temperature of one pound of water one degree Fahrenheit at sea level. The term "at source" means that adjustments have been made for losses in energy which occur during generation, transmission, and distribution of the various energy forms as specified in Energy Conservation Design Manual for New Non-Residential Buildings, California Energy Commission, 1977, and Energy and Transportation Systems, California Department of Transportation, Sacramento, California (Project #20-7, Task 8). All references to Btu in this report are at-source values.

⁷³ Richard G. Stein, Architecture and Energy, 1977, page 299. Building construction energy estimates are available for review at the Office of Environmental Review, Department of City Planning, 450 McAllister Street, Sixth Floor, San Francisco, California.

Administrative Code. The State allows developers to comply with the standards through the component performance standards method which requires the incorporation into a building of a set of specified design features, through the use of nondepletable energy resources, or by demonstrating that the building would consume no more than a specified quantity of energy, expressed as Btu's per square foot per year (energy budget). ⁷⁴ Documentation showing compliance with these standards is submitted with the application for the building permit, and the standards are enforced by the Bureau of Building Inspection.

New standards for retail stores recently have been adopted by the California Energy Commission. These new standards will become mandatory January 1, 1988. It is possible that all or part of this project would be required to comply with the new standards.

Table 16, page 107 shows the estimated operational energy which would be used by the project. Peak electricity demand for the commercial space would be about 11,500 kW (1,580 kW increase) and would occur at about 4:00 to 6:00 P.M. in September. Project demand for electricity during PGandE's peak electrical load periods, July and August afternoons, would be about 10,700 kW (increase of 1,470 kW), an estimated 0.07 percent (0.009 percent increase) of PGandE's peak load of 16,000 MW. ⁷⁵ Annual and peak daily electricity consumption are shown in Figure 28, page 108. Peak natural gas consumption would be about 104×10^6 Btu/day (11.6×10^6 Btu/day increase) and would occur at about 7:00 to 10:00 A.M. in January. Project demand for natural gas during PGandE's peak natural gas load periods, January mornings, would be 104×10^6 Btu per day (11.6×10^6 Btu/day increase), or about 0.002 percent (0.0003 percent increase) of PGandE's peak load of about 4.1 trillion Btu per day. ⁷⁶ Annual and peak daily natural gas consumption are shown in Figure 29, page 109.

Project related transportation would cause additional off-site energy consumption. For the project trip generation described in the transportation section, pages 74-75, project related trips would require gasoline, diesel fuel, and electricity annually. The total annual transportation energy demand, converted with at-source factors to a common

⁷⁴ State of California Energy Resources Conservation and Development Commission, Conservation Division, Energy Conservation Design Manual for New Nonresidential Buildings, 1984.

⁷⁵ San Francisco Department of City Planning, Downtown Plan Environmental Impact Report (EIR), EE81.3, certified October 18, 1984, Volume 1, Page IV.G.3.

⁷⁶ Ibid.

TABLE 16
ESTIMATED PROJECT ENERGY USE ^{a/}

	<u>Project Total</u>	<u>Net Change</u>
<u>Daily Natural Gas Consumption</u> ^{b/}		
Estimated daily natural gas consumption per square foot	53 Btu ^{c/}	18 Btu ^{c/}
Estimated peak daily natural gas consumption	1,037 therms	116 therms
<u>Monthly Electric Consumption</u> ^{b/}		
Estimated monthly electrical consumption per square foot	69 kWh (706,000 Btu) ^{d/}	29 kWh (297,000 Btu) ^{d/}
Estimated total monthly electrical consumption	134,000,000 kWh (1.37 x 10 ¹² Btu)	18,300,000 kWh (188 x 10 ⁹ Btu)
<u>Annual Consumption</u>		
Estimated total annual natural gas consumption	242,000 therms	27,000 therms
Estimated total annual electrical consumption	38,200,000 kWh (391 x 10 ⁹ Btu)	7,690,000 kWh (78.7 x 10 ⁹ Btu)
Connected kilowatt load	11,500 kW	1,580 kW
Estimated total annual energy consumption	387 x 10 ⁹ Btu (2.79 x 10 ⁶ barrels of oil)	67 x 10 ⁹ Btu (483,000 barrels of oil)

Source: Charles Eley Associates

^{a/} Energy use includes space conditioning, service water heating, and lighting in accordance with Title 24.

^{b/} The calculations are available for review at the Office of Environmental Review, Department of City Planning, 450 McAllister Street, 6th Floor, San Francisco, California.

^{c/} Btu (British thermal unit): A standard unit for measuring heat. Technically, it is the quantity of heat required to raise the temperature of one pound of water 1° Fahrenheit (251.97 calories) at sea level.

^{d/} Energy Conversion Factors:

one gallon gasoline = 125,000 Btu
 one kilowatt (kw) = 10,239 Btu assuming efficiency of 33%
 one therm = 100,000 Btu
 one cu. ft. of natural gas = 1,100 Btu at source
 one barrel of oil = 5,600,000 Btu
 one gallon fiesel = 138,700 Btu

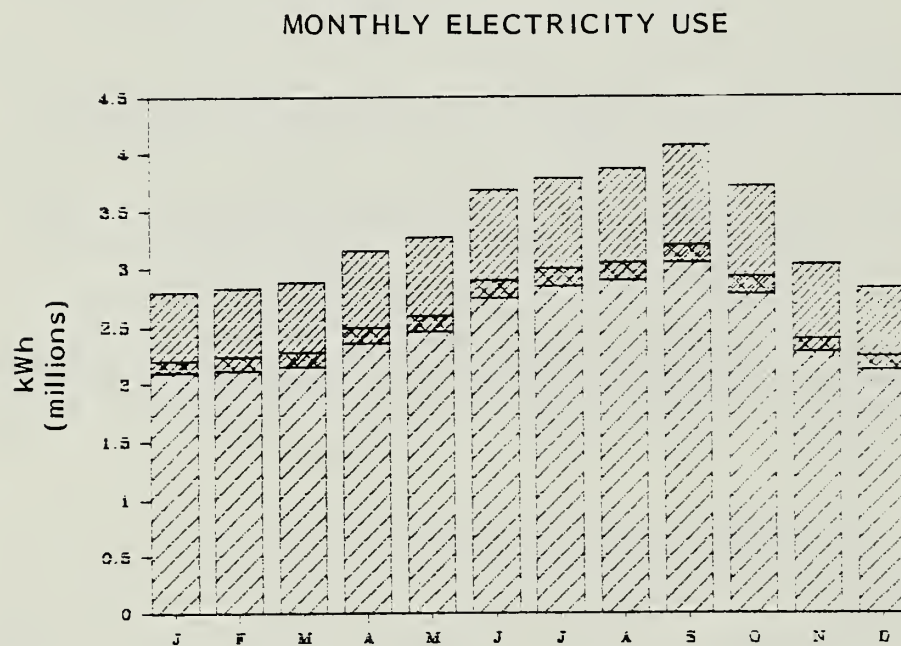
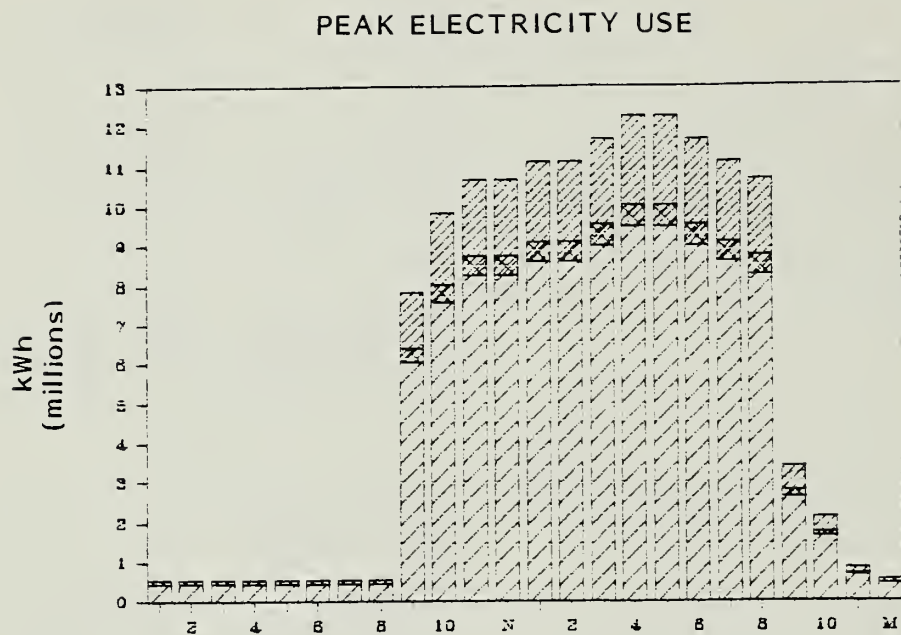
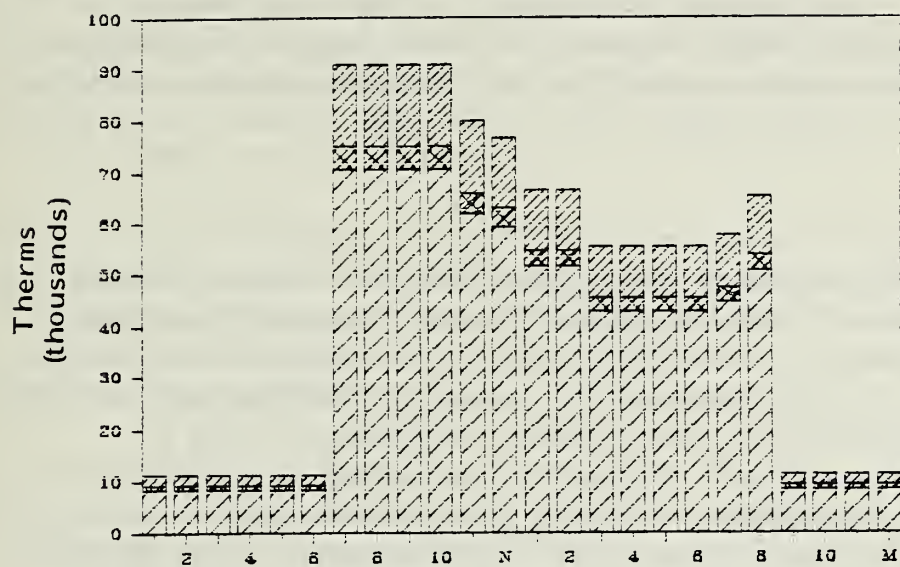


Figure 28. ELECTRICITY CONSUMPTION

STONESTOWN SHOPPING CENTER
RENOVATION AND EXPANSION



AVERAGE DAILY GAS USE



MONTHLY GAS USE

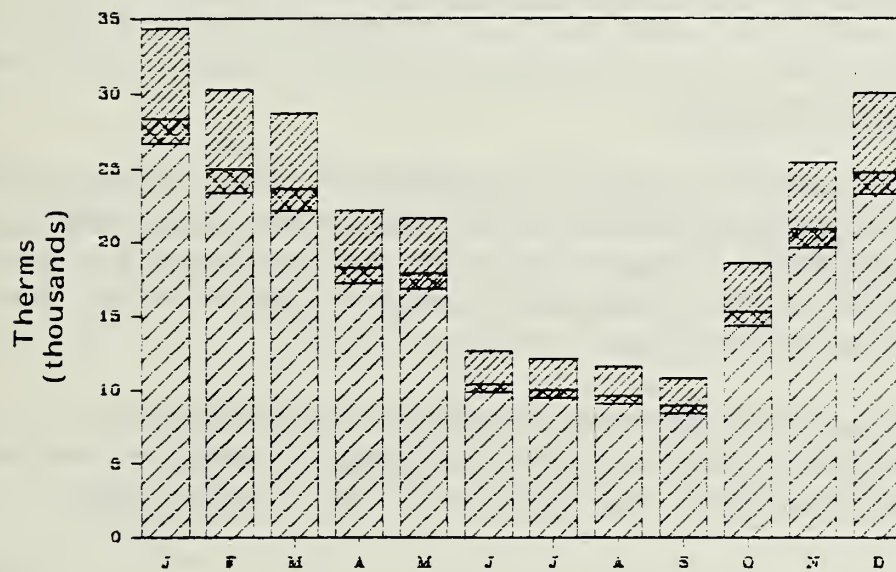
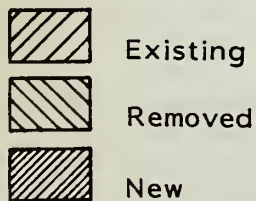


Figure 29. GAS CONSUMPTION



STONESTOWN SHOPPING CENTER
RENOVATION AND EXPANSION

IV. ENVIRONMENTAL IMPACTS

thermal energy unit, would be about 36 billion Btu, the equivalent of 6,400 barrels of oil. ⁷⁷ This projected use is based on the mix of highway vehicles in California in 1990. Vehicle fuel use is expected to decrease as the vehicle fleet becomes more efficient and fuel becomes more expensive.

Energy Policies

In the Energy Policy Component of the Environmental Protection Element of the Master Plan, Policy 4 under Objective 2 states that development should "encourage use of energy conserving appliances and lighting systems". To respond to Policy 4 of this objective, the project sponsor and tenants would install fixtures complying with state Efficiency Regulations (Title 24, California Administrative Code). The project also would address Policy 1 under Objective 4, to "increase the use of transportation alternatives to the automobile". The sponsor has agreed to provide secure, safe bicycle storage facilities needed by employees and shoppers and is considering providing bus shelters in order to encourage transit use by project workers and visitors. The project site is located on major transit lines.

H. EMPLOYMENT AND HOUSING

The project would displace eight existing office tenants which employ about 45 workers. ⁷⁸ Another 26 employees of an engineering firm moved to a new building in September, 1985. ⁷⁹ Relocation plans of other tenants are not known. No other office space is available elsewhere on-site. ⁸⁰ The project sponsor has no relocation plans for these tenants.

Mall level demolition and construction would disrupt retail tenants. Relocation decisions about those tenants would be made by the project sponsor on a case-by-case basis. Fourteen (14) of the 16 retail spaces

⁷⁷ Calculations supporting these conclusions are available for review at the Office of Environmental Review, Department of City Planning, 450 McAllister Street, 6th Floor, San Francisco, California. Figures were calculated based on data contained in the Downtown Plan EIR.

⁷⁸ Idamay Brewster, Stoneson Development Corporation, telephone conversation, November 1, 1985.

⁷⁹ Robinson, Meier, Juilly & Associates, telephone conversation, December 30, 1985.

⁸⁰ The medical building is fully occupied. This building and the one housing Stoneson Development Corporation's administrative offices are the only other locations at Stonestown where offices are provided.

IV. ENVIRONMENTAL IMPACTS

which were vacant as of June, 1985 are located in the mall area.⁸¹ Two of the mall shops have been vacant since 1982, four since 1983, seven since 1984, and three have been vacated in 1985. Twenty-six (26) retail shops have month-to-month tenancy, the leases of two tenants expire in 1986, four in 1987, four in 1988, and one in 1992.⁸²

Conversion of the mall basement to parking would eliminate warehouse space which would not be replaced elsewhere on the site. Retail sales and storage area in the basement or mezzanine could be replaced on the second story of the mall. This would be determined by the project sponsor as part of leasing decisions for individual tenants.

The total number of tenants upon project completion is not known other than that tenants would include one new department store and smaller retail shops. Occupants of the proposed 350,870 square feet⁸³ of new retail space have not been identified.

The proposed project would create an estimated 680 new retail jobs for a buildout employment of 2,170 permanent on-site jobs. Part-time, seasonal employment could increase the retail workforce by 385 to 960 additional jobs.

Construction employment at the project site would peak at about 200 jobs for for about 22 months during the 34-month construction period with fewer construction jobs before and after this peak. Another 100 off-site support jobs could be created during the construction period as a result of the project.⁸⁴

The Office Affordable Housing Production Program requirement for provision of housing does not apply to this retail development.

I. NOISE

The Initial Study determined that the project would not result in significant operational noise impacts (see page A-4 through A-15). Because

⁸¹ The other vacant spaces are the former Bullock's and Joseph Magnin buildings.

⁸² Stoneson Development Corporation tenant list as of July 26, 1985.

⁸³ New department store (148,000 square feet), net new mall level retail space (17,448 square feet), and new mall second story (140,422 square feet).

⁸⁴ Peter Nosler, Rudolph and Sletton (sponsor's contractor), telephone conversation, November 5, 1985.

IV. ENVIRONMENTAL IMPACTS

operational noise continues to be of concern to nearby residents, the acoustical consultant conducted further investigations, concluding that the increase in deliveries associated with the project would not result in a measurable increase in noise levels at any location.⁸⁵ In order to minimize both existing and potential noise from deliveries, a mitigation measure has been included in the project (see page 121).

The noise environment of the project site is dominated by vehicular traffic, including trucks, automobiles, emergency vehicles, streetcars, and buses. The Environmental Protection Element of the Comprehensive Plan indicates a day-night average noise level (L_{dn})⁸⁶ of 80 decibels (dBA)⁸⁷ on Nineteenth Avenue, 75 dBA on Winston Drive, and 70 dBA on Buckingham Way, as measured 50 feet from the centerline of each street.⁸⁸

Measurements of existing noise levels in the vicinity of the site were made on the afternoon of Friday, July 29, 1983. Measurements were made at the three locations:⁸⁹ (1) in the northwest site parking lot adjacent to St. Stephen's church and school (between Buckingham Way and Eucalyptus Drive across Buckingham Way from the proposed garage), (2) along Buckingham Way in front of apartments west of the site (just south of the existing savings and loan building), and (3) in the southwest corner of the Winston Drive-Buckingham Way intersection (within the apartment building setback).

Existing noise levels are lowest in the vicinity of St. Stephen's church and school, where there is daytime equivalent noise level of about 53 dBA, with

⁸⁵ Richard R. Illingworth, P.E., Charles M. Salter Associates, Consultants in Acoustics, letter, December 23, 1985. A copy of this letter is on file at the Office of Environmental Review, Department of City Planning, 450 McAllister Street, Sixth Floor, San Francisco.

⁸⁶ L_{dn} , the day-night average noise level measurement, is based on human reaction to cumulative noise exposure over a 24-hour period, which takes into account the greater annoyance of nighttime noise. Noise between 10:00 P.M. and 7:00 A.M. is weighted ten dBA higher than daytime noise. Fundamental concepts of environmental noise are explained in Appendix E, page A-46.

⁸⁷ A decibel (dB) is a logarithmic unit of sound energy intensity. Sound waves, traveling outward from a source, exert a force known as sound pressure level (commonly called "sound level"), measured in decibels. A dBA is a decibel corrected for the variation in frequency response to the typical human ear at commonly encountered noise levels.

⁸⁸ Department of City Planning, The Plan for Transportation Noise Control, A Section of the Environmental Protection Element of the Comprehensive Plan of the City of San Francisco, adopted by Resolution 7244, September 19, 1974.

⁸⁹ Measurements were made by Charles M. Salter Associates, Consultants in Acoustics. Measurement locations are shown in Appendix E, page A-51.

IV. ENVIRONMENTAL IMPACTS

maximum levels of 55 to 65 dBA generated by individual vehicle pass-bys. The apartment buildings, which are the noise-sensitive receptors closest to the proposed shopping center expansion, are exposed to existing noise levels primarily from traffic on Buckingham Way and Winston Drive. The major noise sources in this area are buses. Measurements for the apartments located approximately 105 feet from the center of Buckingham Way show an average daytime sound level of about 59 dBA. Typical maximum noise levels generated by buses range from 65 to 70 dBA. Second and third story apartments across Winston Drive from the proposed department store are exposed to a daytime equivalent noise level of about 60 dBA with maximum levels ranging from 68 to 77 dBA. First-story units would be affected less by construction noise because they are at a lower elevation than Winston Drive and are shielded somewhat by the elevated roadway.

Project construction would consist of six major activities during a 34-month period: (1) site demolition and clearance (ten weeks), (2) excavation (six weeks), (3) foundation preparation (eight weeks), (4) steel erection (12 weeks), (5) exterior finishing (22 weeks), and (6) interior finishing (30 weeks). Construction of project elements would take place at varying distances from the sensitive receptors. The circulation improvements would be made during the five-month period of Winston Drive reconstruction, Twentieth Avenue realignment, Nineteenth Avenue entrance and access road construction, Twentieth Avenue-Buckingham Way reconstruction, and conversion of the mall basement to parking. The existing mall buildings would be demolished in about one month, and the new two-story mall buildings would be built and enclosed over a 14-month period. The proposed department store and parking garage would be built over a 15-month period.

Noise levels at the sensitive receptors would vary depending on the equipment used, the amount of time equipment would be operated in the noisiest mode, where on the site the equipment would be located, and intervening buildings, which would serve to reduce noise levels. Noise levels at the sensitive receptors are summarized on Table 17, page 114 for the various phases of construction.

Construction of the complex would generate annoying noise levels intermittently over the 34-month building period. It is estimated that there would be intermittent periods when noise levels would interfere with indoor activities of those people occupying the apartment buildings west and southwest of the site. At other times, noise levels outside these buildings would drop to below those typically generated by existing noise sources such as passing buses. Estimated maximum noise levels at a distance of 50 feet from the source from various construction activities for these receptors

TABLE 17
MAXIMUM ESTIMATED CONSTRUCTION NOISE LEVELS ^{a/}

<u>Construction Activity</u>	<u>Sensitive Receptor ^{b/}</u>	<u>Distance Nearest to Noise Source</u>	<u>Estimated Duration</u>	<u>Maximum Outdoor Noise</u>	<u>Indoor Noise ^{c/}</u>	
					<u>Windows Open</u>	<u>Windows Closed</u>
Winston Drive Reconstruction ^{d/}	3	50 feet	5 months	89 dBA	74 dBA	69 dBA
	2	350 feet		72 dBA	57 dBA	52 dBA
Department Store Construction ^{e/}	3	150 feet	15 months	85 dBA	70 dBA	65 dBA
	2	200 feet		83 dBA	68 dBA	63 dBA
	1	700 feet		72 dBA	57 dBA	52 dBA
Parking Garage Construction ^{f/}	2	150 feet		75 dBA	60 dBA	55 dBA
Mall Demolition/ Construction ^{g/}	1	500 feet	15 months	75 dBA	60 dBA	55 dBA
	2	350 feet		78 dBA	63 dBA	58 dBA
	3	350 feet		78 dBA	63 dBA	58 dBA

^{a/} Source: Charles M. Salter Associates, Consultants in Acoustics.

^{b/} Legend: 1 = St. Stephen's church and school between Eucalyptus Drive and Buckingham Way; 2 = apartments northwest of Winston Drive-Buckingham Way intersection; 3 = apartments southwest of Winston Drive-Buckingham Way intersection.

^{c/} Interior daytime noise levels of 60 dBA or higher interfere with normal indoor activity (50 dBA at night).

^{d/} Maximum noise generated by an asphalt paving machine. Grading and pavement removal would generate noise levels of 85 dBA at a distance of 50 feet from their operation.

^{e/} Maximum noise generated by impact wrenches (95 dBA at 50 feet). Cranes would generate maximum noise levels of 78 dBA when operated in their noisiest modes, as heard at the apartments northwest of the Winston Drive-Buckingham Way intersection.

^{f/} Maximum noise levels from operation of a front end loader (used to strip existing asphalt and load it into trucks), concrete pumping trucks, and trucks (85 dBA at 50 feet).

^{g/} Maximum noise levels from pneumatic hammer (95 dBA at 50 feet) and jackhammer (85 dBA at 50 feet) operations.

would be as follows:

89 dBA from front end loaders, asphalt paving machines, and rollers during road reconstruction; 95 dBA from impact wrenches during the steel frame assembly of the department store; 85 dBA from front end loaders, trucks, and concrete pumping trucks during construction of the parking building; 95 dBA from pneumatic hammers and for demolition of the existing buildings. This activity would occur infrequently (about a few hours per day) and occasionally would be annoying to residents in nearby buildings southwest of the site.

The highest sound levels outside the apartment buildings southwest of Winston Drive-Buckingham Way would occur during road construction activities immediately outside. Maximum outdoor noise levels of 89 dBA would be expected; interior noise would reach 74 dBA with windows open and 69 dBA with windows closed. Impact wrenches used to erect the steel frame of the proposed department store would generate outdoor noise levels of 85 dBA at these apartments while indoor noise levels would reach 70 dBA with windows open and 65 dBA with windows closed. Highest sound levels outside the apartment buildings northwest of Winston Drive-Buckingham Way would occur during erection of the steel frame for the proposed department store when outdoor noise levels of 83 dBA would be expected, and interior noise levels would reach 68 dBA with windows open and 63 dBA with windows closed. Highest sound levels at St. Stephen's church and school would result from pneumatic hammer use during mall building demolition. Outdoor noise levels of 75 dBA would be expected, and indoor noise levels would reach 60 dBA with windows open (55 dBA with windows closed). For comparison, typical existing noise levels generated by bus pass-bys are 65 to 77 dBA. Construction generated noise at these locations occasionally would interfere with indoor activities and would be annoying. Noise at levels greater than 60 dBA can interfere with normal speech and concentration; noise at levels greater than 70 dBA would require people indoors to shout to communicate or to close windows.

J. CULTURAL RESOURCES

Maps and records which indicate the location of known cultural resources in the general area were reviewed, including official records and maps for archaeological sites and historic sites which are maintained at the Northwest Information Center of the California Archaeological Inventory.

At the time of the records search the project area had not been surveyed for

IV. ENVIRONMENTAL IMPACTS

archaeological resources, although one prehistoric site is known to be in the vicinity. While little is known of that site (it was disturbed by construction prior to being recorded in 1970), it appears to be in an environmental setting very similar to that of the proposed project. The general environmental features of the Stonestown site are similar, or related, to those of the earlier find; both properties are on the same geologic terrace configuration.

According to the California Archaeological Inventory it is considered likely that unrecorded aboriginal cultural deposits may exist in the project area.

Because of this potential for archaeological discovery in the project area, an archaeological investigation was conducted for the project in February, 1985⁹⁰, and subsurface archaeological testing was done at the location of proposed project excavation and construction. Thirty-eight auger holes were drilled in areas of the planned building expansion, parking lot structure, and on the western portion of Winston Drive, which would be lowered 20 feet.

No evidence of archaeological material or of the likelihood of discovery was encountered during the auger boring. No historic or cultural resources, therefore, would be affected adversely by the proposed project.

Although unlikely, there is a possibility that grading operations might turn up evidence of archaeological materials missed during the augering. These would be expected to take the form of visible amounts of shell fish remains and perhaps carbon, charcoal, and fire-altered rock mixed in with the existing sand matrix. (See page 122 for a mitigation measure which would be implemented in the event that artifacts are encountered.)

⁹⁰ Miley Paul Holman, Holman & Associates, Field Testing for Archaeological Resources at the Proposed Stonestown Development Corporation Improvement Areas, Stonestown, San Francisco, California, February, 1985.

V. MITIGATION MEASURES

V. MITIGATION MEASURES WHICH WOULD MINIMIZE THE POTENTIAL IMPACTS OF THE PROJECT

In the course of project planning and design, measures have been identified that would reduce or eliminate potential environmental impacts of the proposed project. Some of these measures have been, or would be, adopted by the project sponsor or project architect and contractor and, thus, are proposed; the remainder are not included in the project. Implementation of some may be the responsibility of public agencies. Measures under consideration, if applicable, or measures rejected by the sponsor may be required by the City Planning Commission as conditions of project approval. Each mitigation measure and its status are discussed below. Where a measure has not been included in the project, the reasons for this are discussed.

A. TRANSPORTATION, CIRCULATION, AND PARKING

Measures Proposed as Part of the Project

- The proposed lowering of Winston Drive (and with it the removal of the at grade pedestrian crossing under the existing bridge) would eliminate pedestrian-vehicle conflicts at the south end of the mall.
- The proposed lowering of Winston Drive would result in grade less than eight percent to facilitate circulation and safety.
- Paving, landscaping, or structures in the sidewalk area (subject to City approval) would be used so as to minimize interference with pedestrian traffic.
- Secure, safe bicycle storage facilities would be provided relative to the demand generated by project employees and shoppers, as determined by the transportation analysis for the project.
- During the construction period, construction would be restricted to 7:30 A.M. to 5:00 P.M. to reduce peak-hour traffic conflicts. The project sponsor and construction contractor would meet with Caltrans, the Traffic Engineering Division of the Bureau of Engineering of the Department of Public Works, the Fire Department, Muni, and the Department of City Planning to determine feasible traffic mitigation measures to reduce traffic congestion during construction of the project. To minimize cumulative traffic impacts due to street and lane closures during construction, the project sponsor would coordinate with

V. MITIGATION MEASURES

construction contractors for any concurrent nearby projects which are planned for construction or later become known.

- The project sponsor would coordinate with Muni prior to construction to alleviate potential service changes and disruptions caused by project construction.
- As part of the construction contract for the new access point, the project sponsor would ensure that Muni Metro M-Line operations would not be disrupted by construction activity. Work only would proceed when the tracks were clear. A temporary traffic signal or flagperson would be provided to permit safe movement of construction vehicles and through traffic. This measure would be the responsibility of the project sponsor.
- Within one year after occupancy, additional traffic analysis would be done at the Winston Drive-Buckingham Way intersection. If the intersection is operating at level of service "D" or below, the project sponsor would carry out appropriate mitigation such that LOS "C" is maintained. This could include installing traffic signals as described on page 83, eliminating curb parking and restriping approach lanes, or other measures identified in the intersection analysis.

Mitigation Measures Not Included in the Proposed Project

- During the construction period, construction would be restricted to 8:30 A.M. to 4:00 P.M. to reduce peak hour traffic conflicts. This measure has been rejected by the project sponsor.
- To facilitate traffic flow during the reconstruction of Winston Drive, at least one lane could be kept open with traffic controlled by flagpeople. Further, construction of the new entrance on Nineteenth Avenue could be completed before the work starts on Winston Drive.
- To encourage transit use, bus shelters could be provided by the project sponsor at bus stops serving Stonestown. The design and placement of these shelters must be approved by Muni.
- A traffic signal at the Twentieth Avenue-Winston Drive intersection could be installed, which would improve traffic circulation there. The location, however, does not meet signal warrants. This traffic signal must be interconnected with the existing signal at Nineteenth Avenue

V. MITIGATION MEASURES

and Winston Drive because of the proximity of the two intersections. More than one-half of the cost of installing this traffic signal would be borne by the project sponsor. Implementation would be the responsibility of the Department of Public Works.

- Design of the entrance/exit from the proposed garage near the Winston Drive-Buckingham Way intersection to accommodate only right turns in and out would minimize turning movement conflicts. The project sponsor would have the responsibility for this design.
- Replacement of existing non-standard STOP signs with standard STOP signs within Stonestown could improve safety and circulation. The project developer would have the responsibility for these replacements.
- The existing left turn lane from the Muni Metro tracks at the Nineteenth Avenue-Winston Drive intersection would be removed. This measure was rejected by the project sponsor because removal of one left turn lane at Winston Drive would result in an Average Day LOS "E" and Design Day LOS "F" at this intersection, neither of which would be acceptable levels of service for the City or project applicant. Not all drivers turning left at Winston Drive are bound for Stonestown Shopping Center. A new left turn farther north on Nineteenth Avenue, therefore, would not compensate for the loss of left turn capacity at Winston Drive if one lane were to be removed at the latter intersection.
- A pedestrian bridge over Nineteenth Avenue, connecting the Muni Metro stop with the shopping center, could make transit use more attractive to Stonestown customers and reduce potential pedestrian-vehicular conflicts on Nineteenth Avenue. This measure was rejected by the project sponsor for the following reasons. A pedestrian bridge over Nineteenth Avenue near the new access road and entrance would need to ascend about 15 feet, span the road for 40 feet, and descend into the shopping center parking lot about 30 feet because the parking lot grade is 15 feet lower than Nineteenth Avenue. At the Winston Drive intersection, the largest number of pedestrians crossing Nineteenth Avenue only cross the southbound lanes between the Muni Metro stop and the shopping center. It is the sponsor's opinion that not enough pedestrians would use a bridge at either location to merit construction of a bridge over Nineteenth Avenue.

V. MITIGATION MEASURES

Measure Which Could Be Implemented by Public Agencies

- Pacific Gas and Electric Company could coordinate work schedules with other utilities requiring trenching, so that street disruption would take place during weekends and off-peak hours. This would need to be done through the San Francisco Committee for Utility Liaison on Construction and Other Projects (CULCOP). In-street utilities could be installed at the same time as the street is opened for construction of the project to minimize street disruption.

B. AIR QUALITY

Measures Proposed as Part of the Project

- The access and internal circulation measures described with the transportation mitigation measures (see above) would partially offset congestion generated by the project, which, in turn, would reduce vehicle idling time and emissions. Because vehicle emission rates decrease as vehicle speed increases, these measures also would be air quality mitigation measures.
- The project sponsor would require the general contractor to sprinkle demolition sites with water continually during demolition activity; sprinkle unpaved construction areas with water at least twice a day; cover stockpiles of soil, sand, and other such material; cover trucks hauling debris, soil, sand, or other such material; and sweep streets surrounding demolition and construction sites at least twice a day to reduce TSP emissions. Two wettings per day with complete coverage would reduce particulate emissions (dust) by about 50%. The project sponsor would require the general contractor to maintain and operate construction equipment to minimize exhaust emissions by such means as a prohibition on idling motors when equipment is not in use or when trucks are waiting in queues, and implementation of specific maintenance programs for equipment which would be used during construction.

C. ENERGY

Measures Proposed as Part of the Project

- A variable air-volume ventilation system, equipped with an economizer

V. MITIGATION MEASURES

cycle (to use 100% outside when it reaches the appropriate temperature) would be used to reduce energy consumption for air conditioning.

- The project would adhere to the guidelines of the (now withdrawn) Federal Energy Building Temperature Restrictions in the operations of heating, ventilating, and air conditioning (HVAC) equipment.
- The multi-level garage lights would be controlled by light sensors, which would operate these lights on an as-needed basis.
- A carbon monoxide monitoring system would control garage ventilation to avoid unnecessary operation of fans.
- The enclosed mall would be naturally ventilated.

D. NOISE

Measures Proposed as Part of the Project

- The construction contract would require the project contractor muffle and shield intakes and exhaust, shroud or shield impact tools, and use electric-powered rather than diesel-powered construction equipment, as feasible, so that noise would not exceed limits stated in the City's Noise Ordinance (Article 29, San Francisco Administrative Code, 1972).
- The general contractor would construct barriers around stationary equipment such as compressors to reduce noise and/or locate stationary equipment in pits or excavated areas to serve as noise barriers.
- Truck access to and from the construction site would be via the existing parking lot so as to avoid driving past the existing apartment buildings, churches, or school.
- Concrete pump trucks and other stationary equipment would be located as far as possible from the existing buildings to increase occupants' distance from these noise sources.
- To minimize construction impacts, construction would be restricted to the hours of 7:30 A.M. to 5:00 P.M., so as to disturb the smallest number of residents.
- To minimize operational noise impacts, delivery trucks would be

V. MITIGATION MEASURES

prohibited from driving on Buckingham Way's southern leg farther west than the existing loading dock located at the former Bullock's building.

E. CULTURAL RESOURCES

Measures Proposed as Part of the Project

- Should cultural or historic artifacts be found during project excavation, then a qualified archaeologist, retained by the project sponsor, would assess the significance of the find and immediately report to the Environmental Review Officer and the President of the Landmarks Preservation Advisory Board. The archaeologist, as well as the Landmarks Board, would advise the Environmental Review Officer who then would recommend specific mitigation measures, if necessary. Excavation or construction activities which might damage the discovered cultural resources would be suspended for a maximum of four weeks (cumulatively for all instances following the commencement of excavation that the Environmental Review Officer has required a delay in excavation or construction activities) to permit inspection, recommendations, and retrieval, if appropriate. Following site clearance, an appropriate security program would be implemented to prevent looting. Any discovered cultural artifacts assessed as significant by the archaeologist upon concurrence by the Environmental Review Officer and the President of the LPAB would be placed in a repository designated for such materials. Copies of the reports prepared according to this mitigation measure will be sent to the California Archaeological Site Survey at Sonoma State University.

F. GEOLOGY AND TOPOGRAPHY

Measures Proposed as Part of the Project

- A detailed geotechnical report would be prepared by a California-licensed engineer for the project sponsor. The project sponsor and contractor would follow recommendations made in that report regarding project excavation and construction.

G. HAZARDS

Measures Proposed as Part of the Project

- An evacuation and emergency response plan would be developed by the project sponsor or building management staff, in consultation with the Mayor's Office of Emergency Services, to ensure coordination between the City's emergency planning activities and the project's plan and to provide for building occupants in the event of an emergency. The project plan would be reviewed by the Office of Emergency Services and implemented by building management insofar as feasible before issuance by the Department of Public Works of final building permits.
- To expedite implementation of the City's emergency response plan, the project sponsor would post information for building occupants concerning what to do in the event of a disaster.

**VI. SIGNIFICANT ENVIRONMENTAL EFFECTS WHICH CANNOT BE AVOIDED
IF THE PROJECT IS IMPLEMENTED**

In accordance with Section 21067 of the California Environmental Quality Act (CEQA) and with Sections 15040, 15081, and 15082 of the State EIR Guidelines, the purpose of this chapter is to identify impacts that could not be eliminated or reduced to an insignificant level by mitigation measures included as part of the proposed project or by other mitigation measures that could be implemented, as described in Chapter V, Mitigation Measures, page 117.

No significant environmental impacts resulting from the project have been identified.

The findings of significant impacts are subject to a final determination by the City Planning Commission as part of its certification process. Chapter VI of the Final EIR will be revised, if necessary, to reflect the findings of the Commission.

VII. ALTERNATIVES

VII. ALTERNATIVES TO THE PROPOSED PROJECT

This chapter identifies alternatives to the proposed project, discusses environmental impacts associated with these alternatives, and gives the reasons the alternatives were rejected in favor of the project. Regardless of the sponsor's reasons for rejection, the City Planning Commission could approve an alternative over the proposed project if the Commission believes that the alternative would be more appropriate for the site.

A. ALTERNATIVE ONE -- NO PROJECT

1. Description

This alternative would retain Stonestown Shopping Center as it is. No new department store, garage, enclosed mall, new retail areas, or street changes would be implemented. The proposed project would not be built, and the existing open air mall would remain open. No Conditional Use authorization would be required.

2. Environmental Impacts

None of the impacts associated with the proposed project would occur with this alternative. The existing transportation and air quality conditions (see Section III, Setting, D. Transportation, Circulation, and Parking, page 51 and Section III, Setting, E. Air Quality, page 57) would continue. Current transportation, noise, air quality, energy consumption, wind, and shadows would remain unchanged. This alternative would provide no additional construction or permanent employment, no increase of taxable revenues accruing to the City, and no increased cost to the City for supplying services. No existing tenants would be displaced by demolition, construction, or conversion of existing uses. There would be no intensification of development on the site.

3. Sponsor's Reasons for Rejection

The project sponsor has rejected this alternative in the opinion that it would perpetuate an inefficient and wasteful use of the site. The sponsor would not realize the goals of adding a third department store and additional second levels shops to the shopping center. In the sponsor's

VII. ALTERNATIVES

opinion, a minimum of three department stores would be necessary to provide the requisite competitive mix for a viable shopping center. It is the sponsor's belief that the proposed increased number and mix of stores and additional parking would be necessary to return Stonestown Shopping Center to the high level of retail service and convenience it once provided. This objective would not be met by the No Project Alternative.

B. ALTERNATIVE TWO -- DEPARTMENT STORE AT THE EAST SIDE OF THE SITE

1. Description

Under this alternative the proposed third department store would be located east of the existing shopping mall, instead of on the west as proposed by the project. All other features of the proposed development would be the same as the project.

2. Environmental Impacts

Locating the proposed department store at the eastern side of the site would increase its proximity to transit routes along Nineteenth and Twentieth Avenues. Building the department store in the parking lot east of the mall would alter the existing and proposed distribution of parking spaces at Stonestown in relation to where retail area would be concentrated.

Department store construction would eliminate about 194 spaces east of the mall. (This alternative would retain an equal number of spaces at the site west of the mall, proposed by the project for the new department store.) While these 194 spaces would represent a five percent shift of parking to the west side of the site, this alternative would result in 70% of the site's parking supply being located on the west side of the site compared with 66% under existing conditions and 65% with the proposed project.

The change in distribution of parking spaces would increase the total number of people who would drive to the western side of the site. Due to the visibility of the surface parking lot and department store east of the mall, however, it is expected that drivers approaching Stonestown would travel to this area initially to search for parking, which could create congestion in this lot. The new department store and parking garage would be separated from each other on the site. Under the project the garage is proposed to serve shoppers at the new department store (the two facilities would be built together by the department store tenant) in addition to providing

VII. ALTERNATIVES

parking for the second mall story. Persons parking on the west side of the mall would walk farther to the new department store on the east side of the mall under this alternative, compared with the proposed project.

The building envelope of the department store would be the same as proposed by the project. The roof of the 54-foot high department store would be two feet lower than the 56-foot high mall enclosure and 16 feet higher than the mall buildings where the roof is flat (without the skylights). Unless the alternative department store site were excavated to reduce this building height and because the store building would extend 198 to 232 feet into the parking lot to the east, the building would be more prominent visually in relation to development to the east than under the project as proposed. This building would cast shadows on the parking lot earlier in the afternoon (and across a longer distance) than would result from its development on the west side of the site.

Retention of the existing surface parking lot on the west would maintain the existing setback of the shopping center from nearby apartments. Instead of seeing both a department store and garage, as with the proposed project, residents of these apartments would see the second story and enclosure of the mall and the new garage.

3. Sponsor's Reasons for Rejection

The sponsor has rejected this alternative due to public opposition expressed when major new buildings were proposed for the eastern portion of the site in 1977. In the sponsor's opinion, development of the project as proposed on the western portion of the site where the grade is lower would reduce the height of the new department store -- as seen from Nineteenth Avenue -- so that it would appear lower and would be compatible visually with the remainder of the shopping center. The location of the proposed department store at the eastern portion of the site would extend development toward Nineteenth Avenue within the existing setback now provided by the parking area. The sponsor rejected this alternative location for the department store because it would not be adjacent to the proposed parking garage (which would be built on the west side of the site).

C. ALTERNATIVE THREE -- PARKING GARAGE AT THE EAST SIDE OF THE SITE

1. Description

This alternative would locate the proposed parking garage on the east side of the mall, rather than on the west as proposed by the project. In this alternative, all other aspects of the proposed development would be the same as the project.

2. Environmental Impacts

A previous EIR Amendment (EE77.324) examined development of a three-level, 857-space parking garage in Stonestown's eastern parking lot between Nineteenth Avenue and the mall buildings.⁹¹ (This alternative analyzes a four-level, 1,040-space garage.) No significant adverse impacts directly attributable to the proposed parking garage were identified in the 1977 EIR Amendment. That development was not implemented.

The total number of net new parking spaces would be same as for the proposed project. However, this alternative would expand the parking supply on the eastern side of the mall from 1,155 spaces (assuming restriping) to 1,935 spaces, a 68% increase in the number of available spaces.⁹² With this alternative 45% of off-street parking would be provided on the east side of the site, 47% of spaces would be located west of the mall, and eight percent would be provided under the mall. This would result in a nearly even distribution of parking on both sides of the site. The increased parking supply on the east would be accessible to motorists entering Stonestown from the Nineteenth Avenue and would reduce the number of persons who would need to drive to the west side of the site to search for parking.

This alternative would result in provision of 2,053 spaces in the western lots.⁹³ Development of a new department store on the west side would include a demand for 350 spaces, 17% of the supply which would be available on the west side of the mall under this alternative. While this alternative would not provide the proximity to the new garage which the sponsor desires

⁹¹ Department of City Planning, Proposed Stonestown Shopping Center Renovation Project EIR, EE77.324, Amendment to EE76.74, certified April 5, 1970.

⁹² Assumes 1,155 spaces with restriping, plus 780 spaces (the net increase of the 1,040-space garage).

⁹³ This total includes 1,793 existing spaces plus 260 surface spaces which would remain if the garage were built at an alternate site.

for the new department store, due to the garage's development east of the mall, the capacity of the existing 670-space garage, adjacent to the former Bullock's store, is nearly sufficient to accommodate the combined parking demand of both these facilities (695 spaces). There would be a 25-space undersupply within this garage -- a four percent shortfall in off-street parking required by the Planning Code for both stores.⁹⁴

The 1977 EIR Amendment on the previously proposed three-level (ground and two stories) parking garage found no significant visual impacts on views from east of the site, such as on drivers traveling on Nineteenth Avenue. This was because the site slopes downhill from Nineteenth Avenue to grade at the eastern mall building -- by 15 feet -- combined with the shielding provided by landscaping and development (Temple Baptist Church) along the west side of Nineteenth Avenue. The highest elevation of the 39-foot high, four-level (ground plus three stories) garage under this alternative would be 24 feet higher than the elevation of Nineteenth Avenue. This garage would not have a roof enclosing the top parking level. Landscaping and development would remain on Nineteenth Avenue adjacent to the site.

The part of the site on the west side of the mall proposed for the garage by the project would be retained as a surface parking lot. Existing development would remain set back from Buckingham Way opposite the theater, savings and loan, and one cluster of two- and three-story garden apartments. The proposed department store would be built as proposed on the west under both the project and this alternative. (The garage, if built on the west as under the project, would be shorter than the department store -- 39 and 54 feet high, respectively.)

Development east of the mall -- of the garage under this alternative or the department store under Alternative Two -- would reduce the overall time during which residents living west of Stonestown would be exposed to construction generated noise, because less total development would be built on the west side of the site. Retention of the existing parking lot on the west would maintain the existing setback of the shopping center from the theater, savings and loan, St. Stephen's church and school, and some nearby apartments. Instead of seeing both a department store and garage, as with the proposed project, people viewing the site from the west would see the

⁹⁴ The former Bullock's (345 spaces) and new department (350 spaces) stores would require 695 spaces. The Bullock's requirement is based on the 96,310-square feet of occupied area -- 40 spaces for the first 20,000 square feet of occupied area at one space per 500 square feet and 310 spaces for the area in excess of 20,000 square feet at one space per 250 square feet.

second story and enclosure of the mall and the new department store.

3. Sponsor's Reasons for Rejection

The project sponsor has rejected this alternative because of the visual intrusion of the parking garage on the eastern parking area and, due to its massing and height, the potential of blocking views of passersby on Nineteenth Avenue and because of opposition to the construction of major new buildings in this area expressed in 1977. This alternative would not provide the direct proximity to the proposed new department store which is desired by the sponsor.

D. ALTERNATIVE FOUR -- NO NEW DEPARTMENT STORE OR GARAGE

1. Description

Under this alternative, development would consist primarily of the replacement of the existing mall buildings (approximately 369,607 square feet ⁹⁵ of gross floor area of new construction) and enclosure of the mall. No new department store and no new parking garage would be built. Two hundred twenty (220) additional parking spaces would be provided by restriping the existing surface parking areas.

2. Environmental Impacts

The absence of 148,000 square feet of retail area (the proposed department store) would mean about 13% fewer vehicle trips in and out of the site compared with the proposed project and would reduce air pollution, traffic generated noise, and energy consumption correspondingly.

3. Sponsor's Reasons for Rejection

This alternative was rejected by the project sponsor in the opinion that the third department store proposed for the project would be necessary to provide the competitive mix required for a viable regional shopping center.

⁹⁵ New construction (proposed project) of 848,273 square feet less new department store (148,000 square feet) and new garage (330,666 square feet) equals 369,607 square feet of construction under this alternative, for a net increase of 218,523 square feet.

In his opinion, without this department store and its supporting parking garage, the current uneconomic and inefficient use of the site would be perpetuated. The absence from this alternative of 780 new parking spaces (that is, without construction of the garage proposed by the project) would not provide adequate parking to meet the demand expected to be generated by the proposed new second story retail stores, according to the sponsor.

E. ALTERNATIVE FIVE -- NO MAJOR TRANSPORTATION IMPROVEMENTS

1. Description

This alternative would leave the street circulation system as it is. A second access road from Nineteenth Avenue would not be added; nor would consequent changes in that roadway be made; Twentieth Avenue would not be realigned; and Winston Drive would not be depressed. Otherwise, this alternative would be identical to the proposed project.

2. Environmental Impacts

The traffic volume to capacity ratio along Winston Drive under this alternative would be greater than with a second access road from Nineteenth Avenue (the proposed project). At Nineteenth Avenue, the Average Day volume to capacity (V/C) ratio would be 0.87 without the access road (0.84 with the access road). The level of service would be LOS "D" under both cases. At Twentieth Avenue, the Average Day V/C ratio would be 0.67 (LOS "B") without the access road and 0.55 with the access road (LOS "A"). The potential for pedestrian-vehicle conflicts at these two intersections would increase with this alternative without the second access road.

Omitting the new access road would result in less traffic through the intersection of Twentieth Avenue-Buckingham Way, improving both the V/C ratio and level of service. With the new access road, the Average Day V/C ratio would be 0.65 (LOS "B") while without the road this intersection would operate at V/C ratio 0.56 (LOS "A").

Similar changes in V/C ratio and level of service operation would occur for all three intersections when Design Day conditions are analyzed.

No realignment of Twentieth Avenue could increase pedestrian-vehicle conflicts in the surface parking lots located on the east side of the site. Access to the proposed mall basement parking area from east of the shopping

center would be less direct.

The number of pedestrian trips within the site would increase as a result of this alternative (and full occupancy of existing facilities), and traffic volumes on Winston Drive also would increase. Leaving Winston as is (no depression) would increase vehicle-pedestrian conflicts at grade under the second story pedestrian bridge compared with the proposed project. (Without depressing Winston Drive, the mall level addition to the existing bridge would not be built, so pedestrians would continue to cross Winston either at grade or via the existing pedestrian bridge.)

This alternative would not result in the relocation of any Muni or SAMTRANS bus stops and would eliminate any conflict between the proposed J-Church Muni Metro terminal and the left turn lane into the new access road proposed as part of the project.

3. Sponsor's Reasons for Rejection

The sponsor has rejected this alternative due to (1) concerns for safety of pedestrians crossing Winston Drive and Twentieth Avenue, (2) concerns over on-site traffic circulation and the desire to distribute traffic more evenly over the site by using Buckingham Way as well as Winston Drive, and (3) concerns over the accessibility of parking along Twentieth Avenue.

VIII. EIR AUTHORS AND CONSULTANTS; ORGANIZATIONS AND
PERSONS CONSULTED

EIR AUTHORS

San Francisco Department of City Planning
450 McAllister Street, Fifth Floor
San Francisco, California 94102
Environmental Review Officer: Barbara Sahm
EIR Supervisor: Sally Maxwell
EIR Coordinator: Carol Roos

EIR CONSULTANTS

Nichols-Berman
142 Minna Street
San Francisco, California 94105
Bob Berman
Louise Nichols, Project Manager
Carol Ruga

Donald Ballanti
Certified Consulting
Meteorologist
1424 Scott Street
El Cerrito, California 94530
(Air Quality, Shadow, and
Wind)

William H. Liskamm, FAIA
P. O. Box 2604
San Francisco, California 94126
(PDEIR 1 and 2A)

Charles M. Salter Associates
930 Montgomery Street
San Francisco, California
Rich Illingworth, P.E.
(Noise)

Barton-Aschman Associates, Inc.
100 Park Center Plaza, Suite 450
San Jose, California 95113
Roger Marshall
(Transportation Analysis)

Charles Eley, AIA
Charles Eley Associates
142 Minna Street
San Francisco, California 94105
Peter Schwartz
(Energy)

Dr. Miley Holman, Archaeologist
3615 Folsom Street
San Francisco, California 94110
(Cultural Resources Consultant)

Michael Reardon
433-A Lombard Street
San Francisco, California
94133
(Photomontages)

PROJECT SPONSOR

The Stoneson Development Corporation
3150 Twentieth Avenue
San Francisco, California 94132
Arthur Schumacher, Vice President

PROJECT ARCHITECT

John Field, FAIA
Field/Gruzen Associated
Architects
251 Post Street
San Francisco, California 94108
Project Architect:
Sudhish Mohindroo

VIII. EIR AUTHORS AND PERSONS
CONSULTED

TRANSPORTATION CONSULTANT

Barton-Aschman Associates, Inc.
100 Park Center Plaza, Suite 450
San Jose, California 95113
Project Engineers: Jean M. Follette, P.E.

ENERGY CONSULTANTS

Bentley Engineering Company
(PDEIR)
560 Mission Street
San Francisco, California
94105

PERSONS CONSULTED

City and County of San Francisco

Department of City Planning
450 McAllister Street
San Francisco, California 94102
Dave Feltham
Richard Hedman
Inge Horton
Lori Yamauchi

San Francisco Fire Department
Division of Support Services
260 Golden Gate Avenue
San Francisco, California 94102
Edward J. Phipps, Assistant Chief

San Francisco Police Department
Hall of Justice
850 Bryant Street
San Francisco, California 94103
Hal Waterman, Office of Planning and Research

San Francisco Water Department
City Distribution Division
1990 Newcomb Avenue
San Francisco, California 94124
Cy Wentworth, Estimator

Clean Water Program
770 Golden Gate Avenue
San Francisco, California 94102
Nathan Lee

Mayor's Office of Housing and Economic Development
100 Larkin Street
San Francisco, California 94102
Barbara Smith

Municipal Railway
949 Presidio Avenue, Room 211
San Francisco, California 94115
Peter Strauss
Tommy Bruzzoni
Dan Wong

Other Organizations

California Archaeological Inventory
Northwest Information Center
Department of Anthropology
Sonoma State University
Rohnert Park, California 94928
Maureen Steiner, Assistant Coordinator

City of Daly City
333 Ninetieth Street
Daly City, California 94015
Natalie Lawrence, Planning Department

Pacific Gas and Electric Company
245 Market Street
San Francisco, California 94106
Stuart Tartaglia, Industrial Power Engineer

Pacific Telesis
150 Hayes Street
San Francisco, California 94102
Don Perazzo, Building Industry Consultant

Parkmerced Residential Community
3711 Nineteenth Avenue
San Francisco, California 94132
Mrs. Nichols, General Manager's Office

San Francisco State University
1600 Holloway Avenue
San Francisco, California 94132
Dean Parnell, Facilities Planning and Operations

Sunset Scavenger Company
Tunnel Avenue and Beatty Road
Brisbane, California 94005
Steve Barbegelata, Manager

IX. DISTRIBUTION LISTFederal and State Agencies

Northwest Information Center
 Calif. Archaeological Inventory
 Dept. of Anthropology
 Sonoma State University
 Rohnert Park CA 94928
Attn: Christian Cerike

California Dept. of
 Transportation
 Business & Transportation
 Agency
 PO Box 7310
 San Francisco CA 94120
Attn: Darnall W. Reynolds
 District CEQA Coordinator

State Office of Intergovern-
 mental Management (10)
 State Clearinghouse
 1400 Tenth Street
 Sacramento CA 95814

Regional Agencies

Association of Bay Area
 Governments
 PO Box 2050
 Oakland CA 94604

California Dept. of
 Transportation
 Public Transportation Branch
 PO Box 7310
 San Francisco CA 94120
Attn: David Tannehill

Bay Area Air Quality
 Management District
 939 Ellis Street
 San Francisco CA 94109
Attn: Irwin Mussen

City and County of San Francisco

San Francisco City Planning
 Commission
 450 McAllister Street
 San Francisco CA 94102
Attn: Lee Woods
 Toby Rosenblatt, President
 Susan Blerman
 Roger Boas
 Norman Karasick
 Bernice Hemphill
 Yoshio Nakashima
 Richard Allen
 Douglas G. Wright

Bureau of Building Inspection
 450 McAllister Street
 San Francisco CA 94102
Attn: Franklin Lew
 Acting Supervisor

City Attorney's Office
 City Hall, Room 206
 San Francisco CA 94102
Attn: Paula Jesson
 Deputy City Attorney

Landmarks Preservation Advisory
 Board
 450 McAllister Street
 San Francisco CA 94102
Attn: Jonathan H. Malone

Mayor's Economic Development
 Council
 100 Larkin Street
 San Francisco CA 94102
Attn: Bill Witte, Director

Public Utilities Commission
 949 Presidio Avenue, Room 150
 San Francisco CA 94115
Attn: Tom Jordan, Director
 Bureau Services

Public Utilities Commission
 949 Presidio Avenue, Room 150
 San Francisco CA 94115
Attn: Barbara Moy, Asst. Dir.

IX. DISTRIBUTION LIST

Public Utilities Commission
Bureau of Energy Conservation
949 Presidio Avenue, Room 111
San Francisco CA 94115
Attn: Joseph Johnson, Director

Recreation & Park Department
McLaren Lodge, Golden Gate Park
Fell and Stanyan Streets
San Francisco CA 94117
Attn: Deborah Lerner

San Francisco Bureau of
Engineering
Streets and Highways
45 Hyde Street, Room 212
San Francisco CA 94102

Department of Public Works
Bureau of Engineering
Division of Streets & Highways
45 Hyde Street, Room 222
Attn: Tim A. Molinare

San Francisco Comm. for Util.
Liaison on Const. (CULCOP)
City Hall, Room 363
San Francisco CA 94102
Attn: Joseph Corollo

Department of Public Works
Mechanical Engineering Section
45 Hyde Street, Room 222
San Francisco CA 94102
Attn: Vijay K. Gupta

Department of Public Works
Traffic Engineering Division
450 McAllister Street
San Francisco CA 94102
Attn: Scott Shoaf

San Francisco Fire Department
260 Golden Gate Avenue
San Francisco CA 94102
Attn: Ed Phipps, Chief
Division of Planning & Research

San Francisco Municipal Railway
Muni Planning Division
949 Presidio Avenue, Room 204
San Francisco CA 94115
Attn: Peter Strauss

San Francisco Real Estate Dept.
25 Van Ness Avenue, 4th Floor
San Francisco CA 94102
Attn: Wallace Wortman
Director of Property

San Francisco Real Estate Dept.
25 Van Ness Avenue, 4th Floor
San Francisco CA 94102
Attn: George Nakagaki, Manager

Water Department
Distribution Division
425 Mason Street
San Francisco CA 94102
Attn: Hans Bruno
Assistant Manager

Groups and Individuals

AIA
San Francisco Chapter
790 Market Street
San Francisco CA 94102

Bay Area Council
348 World Trade Center
San Francisco CA 94111

Albert Beck
c/o Geography Department
California State University
Chico CA 95929

Bendix Environmental Research
1390 Market Street, Suite 902
San Francisco CA 94102

Georgia Brittan
870 Market Street, Room 1119
San Francisco CA 94102

IX. DISTRIBUTION LIST

Brobeck, Phleger, Harrison
One Market Plaza
San Francisco CA 94105
Attn:Susan R. Diamond

Michael Buck
1333 -- 35th Avenue
San Francisco CA 94122

Dale Carlson
369 Pine Street, #800
San Francisco CA 94104

Charter Commercial Brokerage
Company, Market Research Dept.
101 California Street, Suite 900
San Francisco CA 94111

Chickering & Gregory
3 Embarcadero Center, 23rd Floor
San Francisco CA 94111
Attn:Kent Soule

Coalition for San Francisco
Neighborhoods
Mrs. Dorice Murphy
175 Yukon Street
San Francisco CA 94114

Joseph Cortiz
2853 -- 22nd Street
San Francisco CA 94110

Cushman & Wakefield
Bank of America Center
555 California Street, Suite 2700
San Francisco CA 94104
Attn:Kent Swig

Cushman & Wakefield
Bank of America Center
555 California Street, Suite 2700
San Francisco CA 94104
Attn:James A. Hogland

Cushman & Wakefield
Bank of America Center
555 California Street, Suite 2700
San Francisco CA 94104
Attn:Calvin Dare

Doris Dawdy
3055 -- 23rd Avenue
San Francisco CA 94132

Alex Diamondidis
58 Varennes
San Francisco CA 94133

James S. Dielschneider
258-B Red Rock Way
San Francisco CA 94131

Rita Dorst
RB International
9 Boston Ship Plaza
San Francisco CA 94111

Michael Dyett
Blaynet-Dyett
70 Zoe Street
San Francisco CA 94103

Environmental Impact Planning
319 Eleventh Street
San Francisco CA 94103
Attn:Cathleen Galloway Brown

Environmental Science
Associates
760 Harrison Street
San Francisco CA 94107
Attn:Avril Tolley

Farella, Braun & Martel
235 Montgomery Street
San Francisco CA 94104
Attn:Sandra Lambert

Friends of the Earth
1045 Sansome Street #404
San Francisco CA 94111
Attn:Connie Parrish

Fuller Commercial Brokerage
353 Sacramento Street, Suite 500
San Francisco CA 94111
Attn:Kenneth T. Sproul

Charles T. Gill
The Aspen Group West, Inc.
505 Sansome Street, Suite 1005
San Francisco CA 94111

Mike Gill
111 East Fourth Avenue
San Mateo CA 94401

Goldfarb & Litman
491 Ninth Street
Oakland CA 94607
Attn:Paula Crow

Annette M. Granucci
Commercial News Publishing
Company
125 Twelfth Street
San Francisco CA 94103

Greater West Portal
Neighborhood Association
419 Vicente Street
San Francisco CA 94127
Attn:Howard Strassner

Gruen Gruen + Associates
564 Howard Street
San Francisco CA 94105

Sue Hestor
4536 Twentieth Street
San Francisco CA 94114

Ingleside Terrace Homeowners
Association
150 DeSoto Street
San Francisco CA 94127
Attn:Ron Hummel, President

Steve Ishino
Menlo Trading Company
25 Ingold Road
Burlingame CA 94010

Rev. Richard Jaech
105 South Van Ness Avenue
San Francisco CA 94110

Frank Katzl, Scrumptious Foods
31 Stonestown Mall
San Francisco CA 94132

Lakeside Property Owners
Association
846 Junipero Serra Blvd.
San Francisco CA 94127
Attn:Ruth Lanier, President

Lakeside Homeowners Association
64 Woodacre Drive
San Francisco CA 94132
Attn:Edward Reldy, President

Lakeshore Acres Imprvmt. Club
110 Inverness Drive
San Francisco CA 94132
Attn:William L. Fazio, Pres.

Lakeside Village Merchants Assn.
2600 Ocean Avenue
San Francisco CA 94132
Attn:Bruce Corley, Jr.

Carol Lester
Lawyers Title Company of San
Francisco
One California Street, Suite 2200
San Francisco CA 94111

Bruce Marshall
San Francisco Muni Coalition
600 Montgomery Street, 13th Floor
San Francisco CA 94111

Richard Miller, Cal Insurance
80 Stonestown Mall, Suite 103
San Francisco CA 94132

Ocean Avenue Merchants Association
1552 Ocean Avenue
San Francisco CA 94112
Attn:Patricia Vaughey, Pres.

Ocean View, Merced, Ingleside
Community Association
141 Thrift Street
San Francisco CA 94112
Attn:Mr. I.T. Bonson, Pres.

IX. DISTRIBUTION LIST

Parkmerced Residents Organization
32 Bucarell Drive
San Francisco CA 94132
Attn:Lee Cowan, Chairman

Parkside District Imprvtmt. Club
2187 -- 40th Avenue
San Francisco CA 94116
Attn:Wm. R. Marquering, Pres.

Kay Patchner
Consumer Action
1417 Irving Street
San Francisco CA 94122

Pillsbury, Madison & Sutro
PO Box 7880
San Francisco CA 94120
Attn:Susan Pearlstine

Planning Analysis & Development
530 Chestnut Street
San Francisco CA 94133
Attn:Gloria Root

Neville Price & Associates
25 Ecker Square, Suite 1050
San Francicso CA 94105

Bruce Raful
Rothschild Cappiello
332 Pine Street, Suite 511
San Francico CA 94104

Research & Decisions Corp.
375 Sutter Street, Suite 300
San Francisco CA 94108
Attn:Deborah McNamee

San Francisco Beautiful
41 Sutter Street
San Francisco CA 94104
Attn:Mrs. H. Klussman, Pres.

San Francisco Building &
Construction Trades Council
400 Alabama Street, Room 100
San Francisco CA 94110
Attn:Stanley Smith

San Francisco Chamber of
Commerce
465 California Street
San Francisco CA 94104
Attn:Richard Morten

San Francisco Christian School
699 Serramonte Boulevard
San Francisco CA 94015
Attn:John Innes

San Francisco Convention &
Visitors Bureau
1390 Market Street, Suite 260
San Francisco CA 94102
Attn:George D. Kirkland
Executive Director

San Francisco Ecology Center
13 Columbus Street
San Francisco CA 94111

San Francisco Junior Chamber
of Commerce
251 Kearny Street
San Francisco CA 94104

San Francisco Labor Council
1855 Folsom Street
San Francisco CA 94103
Attn:Bernard Speckman

San Francisco Planning & Urban
Research Association
312 Sutter Street
San Francisco CA 94108

San Francisco Tomorrow
942 Market Street, Room 505
San Francisco CA 94102
Attn:Tony Kilroy

SFRG
241 Bartlett
San Francisco CA 94110

John M. Sanger
Pettit & Martin
101 California Street, 35th Floor
San Francisco CA 94111

IX. DISTRIBUTION LIST

John Schulz
595 Buckingham Way, Suite 331
San Francisco CA 94132

Sedway Cook Associates
350 Pacific Avenue, 3rd Floor
San Francisco CA 94111

Richard Seeley & Company
1814 Franklin Street, #503
Oakland CA 94612

Shartsis Freise & Ginsburg
255 California Street, 9th Floor
San Francisco CA 94111
Attn:Dave Kremer

Sierra Club
730 Polk Street
San Francisco CA 94109

Skidmore, Owings & Merrill
One Maritime Plaza
San Francisco CA 94111
Attn:Danica Truchilokova

Durward Skiles, Stonestown Travel
80 Stonestown Mall, Suite 100
San Francisco CA 94132

Robert Snool
Wells Fargo Bank
475 Laughton Street
San Francisco CA 94103

Mark R. Solit
Embarcadero Center Ltd.
Four Embarcadero, Suite 2600
San Francisco CA 94111

SPEAK
Mrs. R. Brandon, Pres.
524 Moraga Street
San Francisco CA 94122

Square One Fil & Video
725 Filbert Street
San Francisco CA 94133

St. Francis Homes Assoc.
180 Santa Clara Avenue
San Francisco CA 94127
Attn:Forrest N. Faulknor, Pres.

Wayne E. Stiefvater, President
Appraisal Consultants
701 Sutter Street
San Francisco CA 94109

Stonestown Tenants Association
c/o Mrs. Helen M. Howell
145 Buckingham Way
San Francisco CA 94132

Stonestown Tenants Association
c/o Landis Whistler
175 Buckingham Way #101
San Francisco CA 94132

Stonestown Merchants Association
20 Stonestown Mall
San Francisco CA 94132
Attn:Steve Weinger, President

Robert S. Tandler
Steefel, Levitt & Weiss
One Embarcadero Center, 29th Floor
San Francisco CA 94111

Taraval-Parkside Merch. Assn.
2017 Taraval Street
San Francisco CA 94116
Attn:Wm. Slissman, President

Rod Teter
Cahill Construction Company
425 California Street, Suite 2300
San Francisco CA 94104

Jerry Tone, Loan Officer
Real Estate Industries Group
Wells Fargo Bank, N.A.
475 Sansome Street, 19th Floor
San Francisco CA 94111

Kathy Van Valsor
19 Chula Lane
San Francisco CA 94114

Stephen Weicker
899 Pine Street, #1610
San Francisco CA 94108

Calvin Welch
Council of Community Housing
Organization
409 Clayton Street
San Francisco CA 94117

West Portal Ave. Assoc.
69 West Portal Avenue
San Francisco CA 94127
Attn:Mark A. Shustoff, Pres.

Eunice Willette
1323 Gilman Avenue
San Francisco CA 94124

Bethea Wilson & Associates
Art in Architecture
2028 Scott, Suite 204
San Francisco CA 94115

Marie Zeller
Whisler-Patri
590 Folsom Street
San Francisco CA 94105

Adjacent Property Owners

P. Aurello & Jo. G. Silvestri
3090 23rd Avenue
San Francisco CA 94132

Elsie M. McCormick
460 Eucalyptus Drive
San Francisco CA 94132

K.L. & A.T.C. Hu
Merchant Realty
238 12th Avenue
San Francisco CA 94118

Robert Ruppert
3210 19th Avenue
San Francisco CA 94132

Jewel M. Brooks
100 Stonecrest Drive
San Francisco CA 94132

Charles A. DiCristina
136 Stonecrest Dive
San Francisco CA 94132

Martin & Mary Ruane
158 Stonecrest Drive
San Francisco CA 94132

Tung Tick Hong
88 Rossmoor Drive
San Francisco CA 94132

City of San Francisco
222 Stonecrest Drive
San Francisco CA 94132

Harry & Georgia Manetas
238 Stonescrest Drive
San Francisco CA 94132

George & Amy Luo
3089 21st Avenue
San Francisco CA 94132

Alma E. Sommer
400 Eucalyptus Drive
San Francisco CA 94132

Fred & Tackla Muzio
300 Eucalyptus Drive
San Francisco CA 94132

William P. Mirphy
222 Eucalyptus Drive
San Francisco CA 94132

Dorothy K. Kraul
95 Rossmoor Drive
San Francisco CA 94132

Thomas & Patricia Hayes
120 Stonecrest Drive
San Francisco CA 94132

IX. DISTRIBUTION LIST

Fouad & Mimi Malouf
144 Stonecrest Drive
San Francisco CA 94132

Chun Ting Hasian
164 Stonecrest Drive
San Francisco CA 94132

Mitchell & Harriet Sollod
186 Stonecrest Drive
San Francisco CA 94132

John & Laconne Arata
222 Stonecrest Drive
San Francisco CA 94132

Ralph & Jane Brown
247 Stonecrest Drive
San Francisco CA 94132

Alfred & Donna Young
1867 Mission Street
San Francisco CA 94103

Goldie E. Willey
430 Eucalyptus Drive
San Francisco CA 94132

Geraldine R. Lineger
3090 21st Avenue
San Francisco CA 94132

C.C. & Irene Chiang
3090 20th Avenue
San Francisco CA 94132

Mercy High School
3250 19th Avenue
San Francisco CA 94132

Hazel Klein
128 Stonecrest Drive
San Francisco CA 94132

John & Alice Hightower
152 Stonecrest Drive
San Francisco CA 94132

Edward A. Fitzgerald
170 Stonecrest Drive
San Francisco CA 94132

Thuy Trung Thai
194 Stonecrest Drive
San Francisco CA 94132

Desmond & Evelyn Fitzgerald
230 Stonecrest Drive
San Francisco CA 94132

Natalie Rokusek
154 Stonecrest Drive
San Francisco CA 94132

Temple Baptist Church
3555 19th Avenue
San Francisco CA 94132

Roman Catholic Archbishop of
San Francisco
St. Stephen's Church
601 Eucalyptus Drive
San Francisco CA 94132

Roman Catholic Welfare Corp.
of San Francisco
601 Eucalyptus Drive
San Francisco CA 94132

City of San Francisco
3177 19th Avenue
San Francisco CA 94132

Hilday Lal
262 Stonecrest Drive
San Francisco CA 94132

YMCA TR
220 Golden Gate Avenue
San Francisco CA 94102

Hellen F. Altel
501 Eucalyptus Drive
San Francisco CA 94132

Stoneson Development Corp.
3150 20th Avenue
San Francisco CA 94132

San Francisco Unified School
District
3711 19th Avenue
San Francisco CA 94132

Col City Presbyterian
Church
201 Eucalyptus Drive
San Francisco CA 94132

Facilities Planning & Operations
San Francisco State University
1600 Holloway Avenue
San Francisco CA 94132
Attn:Dean Parnell

Lowell High School
1101 Eucalyptus Drive
San Francisco CA 94132

Media

San Francisco Bay Guardian
2700 -- 19th Street
San Francisco CA 94110
Attn:Patrick Douglas
City Editor

San Francisco Business Journal
635 Sacramento Street, Suite 310
San Francisco CA 94111
Attn:Kristin E. Downey

San Francisco Chronicle
925 Mission Street
San Francisco CA 94103
Attn:Evelyn Hsu

San Francisco Examiner
PO Box 7260
San Francisco CA 94120
Attn:Gerald Adams

San Francisco Examiner
PO Box 7260
San Francisco CA 94120
Attn:Laura Itow

San Francisco Progress
851 Howard Street
San Francisco CA 94103
Attn:E. Cahill Maloney

The Sun Reporter
1366 Turk Street
San Francisco CA 94115

Tenderloin Times
146 Leavenworth Street
San Francisco CA 94102
Attn:Rob Waters

Libraries

Cogswell College Library
600 Stockton Street
San Francisco CA 94108

Document Library
City Library, Civic Center
San Francisco CA 94102
Attn:Faith Van Liere

Sunset Branch (2)
San Francisco Public Library
1305 18th Avenue
San Francisco CA 94132

Environmental Protection
Agency Library
215 Fremont Street
San Francisco CA 94105
Attn:Jean Circiello

Stanford University Libraries
Jonsson Library of Government
Documents, State & Local
Documents Division
Stanford CA 94305

Government Publications Dept.
San Francisco State University
1630 Holloway Avenue
San Francisco CA 94132

Hastings College of the Law
Library
200 McAllister Street
San Francisco CA 94102-4978

Institute of Governmental Studies
1209 Moses Hall
University of California
Berkeley CA 94720

Pacific Gas and Electric
77 Beale Street, #2429
San Francisco CA 94105

Pacific Bell
140 New Montgomery Street
San Francisco CA 94105

X. APPENDICES

APPENDICES
TABLE OF CONTENTS

	<u>Page</u>
A. Final Initial Study	A-3
B. Project Description	A-30
1. Existing and Proposed Building Areas	A-30
2. Parking Summary	A-31
3. Employment	A-32
C. Transportation	A-33
1. Trip Generation Documentation	A-33
2. Directions of Approach	A-37
3. Level of Service Definitions for Signalized Intersections	A-38
4. Parking Occupancy of 35 Unmarked Spaces on Nineteenth Avenue Between Winston and Eucalyptus Drives	A-39
5. Shopping Center Expansion Trip Generation Rate	A-40
6. Stonestown Shopping Center Estimate of Saturday Impacts	A-42
7. Planning Code Parking Requirements	A-43
D. Air Quality	A-44
1. Air Quality Assumptions and Methodology	A-44
E. Noise	
1. Fundamental Concepts of Environmental Noise	A-46
2. Noise Measurement Locations	A-51



DEPARTMENT OF CITY PLANNING 450 McAllister St. - 5th Floor

(415) 558-5260

NOTICE THAT AN
ENVIRONMENTAL IMPACT REPORT
IS DETERMINED TO BE REQUIRED

Date of this Notice: April 20, 1984

Lead Agency: City and County of San Francisco, Department of City Planning
450 McAllister St. - 5th Floor, San Francisco CA 94102

Agency Contact Person: Carol Roos

Tel: (415) 558-5261

Project Title: 83.98E
Stonestown Shopping Center
Renovation and Expansion

Project Sponsor: The Stoneson Development Corp.
Project Contact Person:
Mr. Art Schumacher

Project Address: Nineteenth Avenue and Winston Drive

Assessor's Block(s) and Lot(s): A/B 7295:Lots 4,6,7,19;A/B 7296:Lots 5-9.

City and County: San Francisco.

Project Description: Expansion and renovation of the Stonestown Shopping Center. New construction, including a major department store of about 150,000 gross sq.ft.; 157,000 gross sq.ft. in a new second floor above existing buildings; a 248,000 gross sq.ft. parking garage (780 spaces); conversion of 154,530 gross sq.ft. of basement retail storage and loading to 350 parking spaces; relocation of 4 loading spaces; enclosure of the existing mall to contain 64,000 gross sq.ft. of covered pedestrian area; construction of a new access road from 19th Avenue; and lowering of a portion of Winston Drive.

THIS PROJECT MAY HAVE A SIGNIFICANT EFFECT ON THE ENVIRONMENT AND AN ENVIRONMENTAL IMPACT REPORT IS REQUIRED. This determination is based upon the criteria of the Guidelines of the State Secretary for Resources, Sections 15081 (Determining Significant Effect), 15082 (Mandatory Findings of Significance) and 15084 (Decision to Prepare an EIR), and the following reasons, as documented in the Initial Evaluation (initial study) for the project, which is on file at the Department of City Planning:

Please see attached Initial Study.

Deadline for Filing of an Appeal of this Determination to the City Planning Commission: April 30, 1984.

An appeal requires 1) a letter specifying the grounds for the appeal, and 2) a \$35.00 filing fee.

Alec S. Bash
Alec S. Bash, Environmental Review Officer

INITIAL STUDY

STONESTOWN SHOPPING CENTER RENOVATION AND EXPANSION

83.98E

April 16, 1984

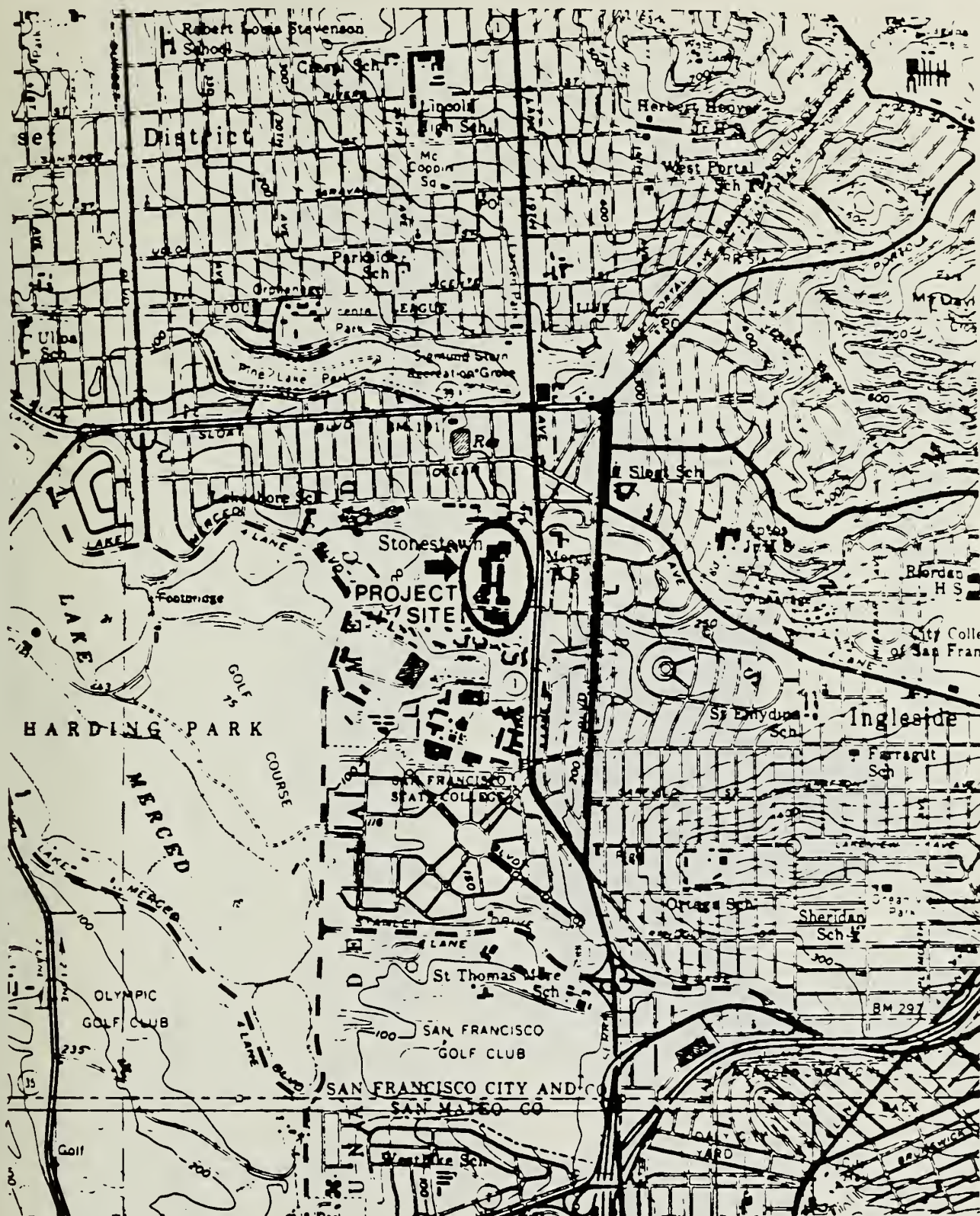
I. PROJECT DESCRIPTION

The Stoneson Development Corporation proposes to expand and renovate the Stonestown Shopping Center, a regional shopping center located at 19th Avenue and Winston Drive in the southwesterly area of San Francisco (see Figure 1, page 2). The site, which is bounded by 19th Avenue, Eucalyptus Drive, Buckingham Way and Winston Drive, includes Lots 4, 6, 7 and 19 in Assessor's Block 7295, and Lots 5 through 9 in Assessor's Block 7296. The project site is in a C-2 (Community Business) district.

The project (see Figures 2 and 3, pages 3 and 4) would include construction of a new department store west of the existing mall that would be four floors in height (including a mezzanine floor), and would include a basement level with entry on Winston Drive.

A new retail area would be located in a new second floor above the existing mall level shops and in part of the existing exterior mall at grade. Existing mall level retail stores would be renovated, and the mall would be enclosed. Service areas for truck loading/unloading would provide three truck loading spaces at each of the four corners of the mall building (total: 12 truck spaces).

A new parking garage would be located west of the existing mall and north of the proposed department store, which would have three levels above grade, with a capacity of 260 cars per level, or 780 total spaces. The existing basement under the mall now used for retail storage and loading would provide parking for 350 cars and provide service areas for five trucks. A new ramp would be constructed down to the basement parking from the existing parking area east of the mall. A new access road from 19th Avenue into the shopping center is



SITE LOCATION MAP

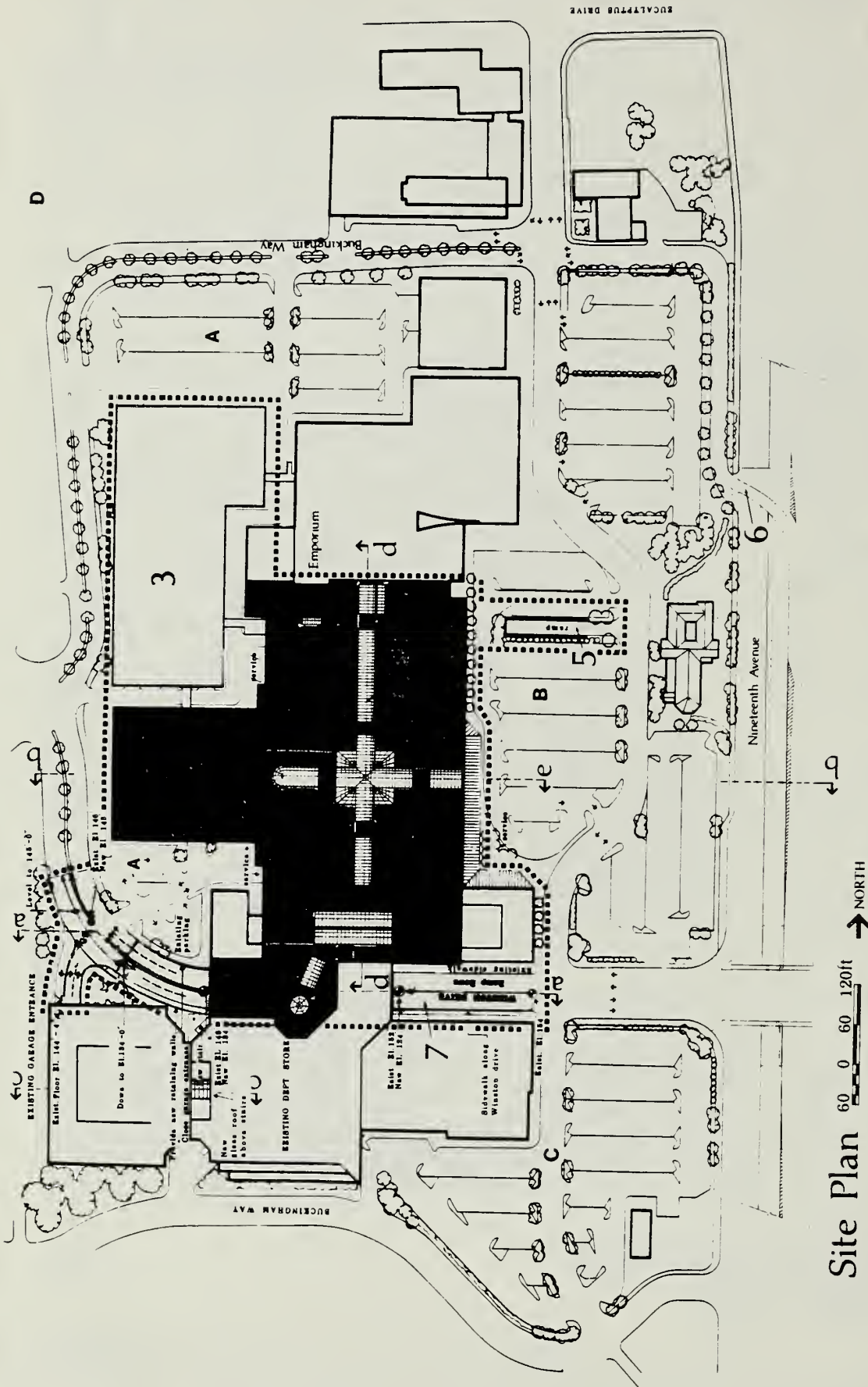
0 2,000 4,000
scale ft.

A-5



FIGURE 1

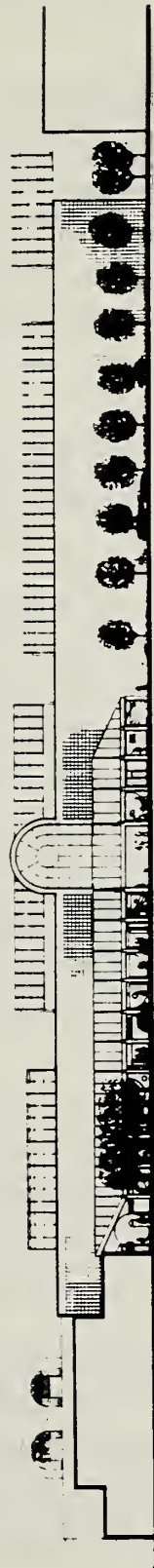
Source: W.Liskamm



Site Plan 60 0 60 120ft → NORTH

LEGEND

- 1 PROPOSED SECOND LEVEL SHOPS
- 2 PROPOSED DEPARTMENT STORE
- 3 PROPOSED PARKING GARAGE
- 4 PROPOSED MALL ENCLOSURE
- 5 PROPOSED RAMP DOWN TO BASEMENT PARKING
- 6 PROPOSED ACCESS ROAD
- 7 PROPOSED LOWERING OF WINSTON DRIVE
- AREA PROPOSED FOR NEW CONSTRUCTION AND RENOVATION



NINETEENTH AVENUE ELEVATION 16 0 16 32 ft



WINSTON DRIVE AND BUCKINGHAM WAY ELEVATION 16 0 16 32 ft

MOORE & FIELD/GRUZEN
Associated Architects/Planners

FIGURE 3
PROPOSED PROJECT ELEVATIONS

proposed. Winston Drive would be depressed near the existing Bullock's department store to permit pedestrian crossing at grade in this area.

The proposed department store would add approximately 150,000 gross square feet of area, the proposed parking garage would add approximately 248,000 gross square feet and approximately 157,000 gross square feet would be added to the existing mall buildings. Enclosure of the existing mall would provide a covered pedestrian area of approximately 64,000 gross square feet in an area that is now exterior space. Approximately 154,530 gross square feet of basement would be converted to parking.

The proposed project would add approximately 256,982 square feet of Gross Leasable Area (GLA) (a department store of 150,000 square feet of GLA, and a retail area of 106,982¹ square feet of GLA on the second floor above the existing mall shops, and in part of the area now used as outdoor area at grade) to the 766,102² square feet of GLA that currently exists at Stonestown. (Note: As the entire department store building will be leased, both gross and GLA equal 150,000 square feet.) The proposed project would bring the overall total GLA of Stonestown to 1,023,084 square feet of GLA when completed. The proposed project would remove 194 parking spaces for the new department store construction and would add 350 new spaces in the basement. The new parking garage would provide 780 spaces, and restriping of existing surface parking would add 220 spaces, which would bring the total number of parking spaces at Stonestown from the current total of 3,314 spaces to 4,470 spaces, a net increase of 1,156 parking spaces.

The proposed project would add the following gross occupied area (as defined by the San Francisco Planning Code) is as follows: mall building: (first and second levels) 197,000 gross occupied square feet (including 64,000 gross occupied square feet of covered pedestrian mall area) ; basement 152,985 gross

¹ This Gross Leasable Area does not include the 50,018 square feet of corridors and other public areas included in the mall building.

² Excluding: (a) Office space at Mezzanine which would be eliminated by the proposed renovation: 14,127 square feet GLA
Warehouse at Basement: 97,138 square feet GLA which is proposed for conversion to parking.

occupied square feet of parking; proposed department store: 108,500 gross occupied square feet; proposed parking garage: 243,040 gross occupied square feet.

II. SUMMARY OF POTENTIAL ENVIRONMENTAL EFFECTS

A. EFFECTS FOUND TO BE POTENTIALLY SIGNIFICANT

The Stonestown Shopping Center Renovation and Expansion Project is examined in this Initial Study to identify its potential effects on the environment. The proposed project may generate environmental effects that could be considered significant and these will be analyzed in the Environmental Impact Report (EIR) for the project. Potential environmental effects which require further analysis in an EIR include: compatibility with existing zoning and plans of the City; visual quality; transportation and circulation; air quality; noise during construction; and energy.

B. EFFECTS FOUND NOT TO BE SIGNIFICANT

Some potential environmental effects would either be insignificant or would be mitigated through measures incorporated into the project design. These require no further environmental analysis. They include:

1. Land Use Compatibility: The project would be consistent with existing and proposed land uses in the project area. It would be part of an existing regional shopping center and would not disrupt or divide the physical arrangement of an established community, or have any substantial impact upon the existing character of the vicinity.

2. Relocation: No housing or businesses would be displaced for the new department store and parking garage.

3. Operational Noise: After completion, project operation would not perceptibly increase noise levels in the project vicinity. (Construction noise will be discussed in the EIR.)

4. Air Quality Impacts During Construction and Impacts from Odors/Burning of Materials: Construction of the proposed project would not violate any ambient air quality standard, create objectionable odors or involve the burning of materials. The project sponsor has agreed to mitigation measures

occupied square feet of parking; proposed department store: 108,500 gross occupied square feet; proposed parking garage: 243,040 gross occupied square feet.

II. SUMMARY OF POTENTIAL ENVIRONMENTAL EFFECTS

A. EFFECTS FOUND TO BE POTENTIALLY SIGNIFICANT

The Stonestown Shopping Center Renovation and Expansion Project is examined in this Initial Study to identify its potential effects on the environment. The proposed project may generate environmental effects that could be considered significant and these will be analyzed in the Environmental Impact Report (EIR) for the project. Potential environmental effects which require further analysis in an EIR include: compatibility with existing zoning and plans of the City; visual quality; transportation and circulation; air quality; noise during construction; and energy.

B. EFFECTS FOUND NOT TO BE SIGNIFICANT

Some potential environmental effects would either be insignificant or would be mitigated through measures incorporated into the project design. These require no further environmental analysis. They include:

1. Land Use Compatibility: The project would be consistent with existing and proposed land uses in the project area. It would be part of an existing regional shopping center and would not disrupt or divide the physical arrangement of an established community, or have any substantial impact upon the existing character of the vicinity.

2. Relocation: No housing or businesses would be displaced for the new department store and parking garage.

3. Operational Noise: After completion, project operation would not perceptibly increase noise levels in the project vicinity. (Construction noise will be discussed in the EIR.)

4. Air Quality Impacts During Construction and Impacts from Odors/Burning of Materials: Construction of the proposed project would not violate any ambient air quality standard, create objectionable odors or involve the burning of materials. The project sponsor has agreed to mitigation measures

which would decrease particulates and emissions from construction equipment by about 50 percent during the construction period.

5. Utilities and Public Services: Increased demand for public services and utilities attributable to the project would not require additional personnel or equipment.

6. Biology: The project would have no significant effect on plant or animal life as most of the site is paved or developed.

7. Geology/Topography: The project would be constructed under the supervision of California-licensed structural and geotechnical engineers, and would comply with all applicable seismic and life safety standards.

8. Water: Although some drainage patterns would be altered, the project would have no effect on surface water drainage as most of the site is paved or developed and surface water runoff is collected into the street storm sewer system.

9. Hazards: The site and the project would neither cause nor be affected by hazardous uses or health hazards. No interference with existing emergency response plans nor evacuation plans would be expected.

10. Cultural: No significant subsurface resources are expected to be encountered during construction. Mitigation measures would be implemented by the project sponsor to protect any potential resources on the site.

III. ENVIRONMENTAL EVALUATION CHECKLIST

A. COMPATIBILITY WITH EXISTING ZONING AND PLANS

Could the project:	<u>YES</u>	<u>NO</u>	<u>DISCUSSED</u>
1. Require a variance, special authorization, or change to the City Planning Code or Zoning Map?	<u>X</u>	<u> </u>	<u> X </u>
2. Conflict with the Comprehensive Plan of the City and County of San Francisco	<u> </u>	<u> X </u>	<u> X </u>
3. Conflict with any other adopted environmental plans of the City or Region?	<u> </u>	<u> X </u>	<u> X </u>

The project requires amendment of Conditional Use authorization (CU 76.31 and CU 76.32), approved by the City Planning Commission October 14, 1976, (Resolutions 7579 and 7580) which will be discussed in the EIR together with the project's conformity with the Comprehensive Plan and issues related to its compatibility with existing zoning.

B. ENVIRONMENTAL EFFECTS

- | | | | |
|---|------------|-----------|------------------|
| 1. <u>Land Use.</u> Could the project: | <u>YES</u> | <u>NO</u> | <u>DISCUSSED</u> |
| a. Disrupt or divide the physical arrangement of an established community? | _____ | <u>X</u> | <u>X</u> |
| b. Have any substantial impact upon the existing character of the vicinity? | _____ | <u>X</u> | <u>X</u> |

The proposed project would intensify development of an existing regional shopping center. The proposed uses would be consistent with surrounding land uses and would not disrupt or divide the physical arrangement of an established community.

An apartment development, owned by the project sponsor, containing 323 units of garden apartments and 360 units in several apartment towers is adjacent to the site on the south and west. Additional apartment buildings, a theater and a savings and loan building are also located west of the site across Buckingham Way. Two churches, a school and a single family neighborhood are north of the site. Another church is located along 19th Avenue at the east of the site. The project is not anticipated to have any substantial impact upon the existing character of the vicinity.

This topic requires no further discussion and will not be discussed in the EIR.

- | | | | |
|---|------------|-----------|------------------|
| 2. <u>Visual Quality.</u> Could the project: | <u>YES</u> | <u>NO</u> | <u>DISCUSSED</u> |
| a. Have a substantial, demonstrable negative aesthetic effect? | <u>X</u> | _____ | <u>X</u> |
| b. Substantially degrade or obstruct any scenic view or vista now observed from public areas? | _____ | <u>X</u> | <u>X</u> |
| c. Generate obtrusive light or glare substantially impacting other properties? | <u>X</u> | _____ | <u>X</u> |

The project's design and its relationship to policies of the Urban Design Element of the Comprehensive Plan will be discussed in the EIR. The project would not block public views. However, it would affect views from nearby residences and this will be discussed in the EIR along with the project's effects related to light and glare.

3. <u>Population.</u> Could the project:	<u>YES</u>	<u>NO</u>	<u>DISCUSSED</u>
a. Induce significant growth or concentration of population?	_____	<u>X</u>	<u>X</u>
b. Displace a large number of people (involving either housing or employment)?	_____	<u>X</u>	<u>X</u>
c. Create a substantial demand for additional housing in San Francisco, or substantially reduce the housing supply?	_____	<u>X</u>	<u>X</u>

As described in the Final Environment Impact Report, Proposed Stonestown Shopping Center Renovation Project, San Francisco, California EE76.74, certified October 14, 1976 (Resolution No. 7578) page 92, it is unlikely that the proposed project would alter the density of the area's population and/or have a growth-inducing effect.

No housing or businesses would require relocation in order to clear the site for the new department store and parking garage.

Construction, operation and maintenance of the project would create jobs. About 82-123 construction jobs¹ would be created by this project, mainly in the building trades, during two 8-month construction periods. Construction expenditures and employment would also generate short-term demand in other sectors of the economy, such as construction materials, retail and service sectors.

¹ Based on a total construction cost of \$25 million, and two 8-month construction periods, (\$15 million during the first period and \$10 million during the second) there would be an average of about 123 workers during the first period, and about 82 workers during the second. (Source: Peter Nassler, Rudolph and Sletten, Contractors, San Francisco.)

Operation and maintenance of the project would generate about 734 new permanent jobs¹ at the shopping center.

This topic requires no further discussion and will not be discussed in the EIR.

4. Transportation/Circulation. Could the project:

	<u>YES</u>	<u>NO</u>	<u>DISCUSSED</u>
a. Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system?	<u>X</u>	<u> </u>	<u> X </u>
b. Interfere with existing transportation systems, causing substantial alterations to circulation patterns or major traffic hazards?	<u>X</u>	<u> </u>	<u> X </u>
c. Cause a substantial increase in transit demand which cannot be accommodated by existing or proposed transit capacity?	<u> </u>	<u> X </u>	<u> X </u>
d. Cause a substantial increase in parking demand which cannot be accommodated by existing parking facilities?	<u>X</u>	<u> </u>	<u> X </u>

It is not anticipated that the project would increase transit demand beyond capacity. However, transit, additional traffic and parking that would be generated by the project, and the effects of the proposed access road and Winston Drive underpass on existing transportation systems and facilities will be addressed in the EIR.

5. Noise. Could the project:

	<u>YES</u>	<u>NO</u>	<u>DISCUSSED</u>
a. Increase substantially the ambient noise levels for adjoining areas?	<u>X</u>	<u> </u>	<u> X </u>
	(Construction only)		
b. Violate Title 25 Noise Insulation Standards, if applicable?	<u> </u>	<u> X </u>	<u> X </u>
c. Be substantially impacted by existing noise levels?	<u> </u>	<u> X </u>	<u> X </u>

¹ Based on one retail worker per 350 square feet of retail space (256,982 square feet ÷ 350 = 734 employees. (Source: California Office of Planning and Research, "Economic Practices Manual" January 1978.)

Sound levels near the site are dominated by vehicular traffic. Sound measurements made of the nearest noise-sensitive land uses to the project site (apartment buildings opposite the site across Winston Drive and Buckingham Way, and a church and school located to the northwest between Buckingham Way and Eucalyptus Drive) indicate a daytime equivalent noise level ranging from 53 dBA¹ at the vicinity of the church and school, and 59-60 dBA at the apartment buildings.²

The Environmental Protection Element of the San Francisco Comprehensive Plan contains noise guidelines for determining the compatibility of land uses with various noise environments. For retail uses, the guidelines recommend no special noise control measures in an exterior noise environment of up to a noise level (L_{dn}) of 70 dBA. However, an analysis of noise reduction would be prepared for the project sponsor and recommended noise insulation features would be included in the project. For example, the project would include noise insulation measures (e.g. noise barrier wall construction, thicker window glass, noise reducing interior layouts, etc.) contained in the Noise Guidelines of the San Francisco Comprehensive Plan. As the existing noise levels do not exceed the recommended guideline level for a retail building, ambient noise levels would have no significant effect on the project.

After project completion, project operation would not perceptibly increase noise levels in the project vicinity. Operational noise would be regulated by, and the project would comply with, the San Francisco Noise Ordinance No. 274-72 (Part II, Chapter VIII, San Francisco Municipal Code). In the C-2 Use District, the ordinance limits equipment noise levels to 70 dBA between 7 a.m. and 10 p.m. and 60 dBA between the hours of 10 p.m. and 7 a.m. at the receiver's property line. As equipment noise levels would be limited to 55dBA to meet the nighttime limit of the adjacent residential area, they would not be perceptible within the

¹ dBA, a decibel (logarithmic unit of sound energy intensity) that is corrected for the variation in frequency response to the typical human ear at commonly encountered noise levels.

² A copy of the noise report is available for review at the Department of City Planning Office of Environmental Review located at 450 McAllister Street, San Francisco. (The measurements were made between 1:50 p.m. and 3:33 p.m., Friday, July 29, 1983.)

sound-level context of the project. Further discussion of operational noise is not required in the EIR.

Project construction would occur over two 8-month periods (to meet the retailing needs of the Christmas season) during two consecutive years. It is planned that 50 percent to 80 percent of the construction work would be completed in the first 8-month period, and that during the second year the work would consist primarily of the renovation of the existing building. Project construction activities would temporarily cause noise levels to exceed those existing in the site vicinity.

Construction noise will be discussed in the project EIR.

6. Air Quality/Climate. Could the project:

	<u>YES</u>	<u>NO</u>	<u>DISCUSSED</u>
a. Violate any ambient air quality standard or contribute substantially to an existing or projected air quality violation?	<u>X</u>	<u> </u>	<u>X</u>
b. Expose sensitive receptors to substantial pollutant concentrations?	<u> </u>	<u>X</u>	<u> </u>
c. Permeate its vicinity with objectionable odors?	<u> </u>	<u>X</u>	<u> </u>
d. Alter wind, moisture or temperature (including sun shading effects) so as to substantially affect public areas, or change the climate either in the community or region?	<u>X</u>	<u> </u>	<u>X</u>

It is not anticipated that the project would generate substantial pollutant concentrations or objectionable odors. However, the project's air quality effects due to increased traffic, and its potential effects on sun, shade and wind will be discussed in the EIR.

7. Utilities/Public Services. Could the project:

	<u>YES</u>	<u>NO</u>	<u>DISCUSSED</u>
a. Breach published national, state or local standards relating to solid waste or litter control?	<u> </u>	<u>X</u>	<u>X</u>
b. Extend a sewer trunk line with capacity to serve new development?	<u> </u>	<u>X</u>	<u>X</u>

- | | | | | |
|----|---|-------|---|---|
| c. | Substantially increase demand for schools, recreation or other public facilities? | _____ | X | X |
| d. | Require major expansion of power, water, or communication facilities? | _____ | X | X |

According to the San Francisco Fire Department, the water supply to the area is sufficient for fire service purposes. No increase of personnel or equipment would be required due to this project.¹

The shopping center itself is patrolled by the Stonestown security force. The proposed project is within the Taraval Police District, and the project area is patrolled 24 hours a day by radio-dispatched patrol cars of the San Francisco Police Department. The project would increase population and property on the site, which could increase the potential for crime-although this is difficult to predict. The need for additional police resources as a result of this proposed project is not foreseen.²

It is doubtful that the project would generate any significant increase in school-aged children. However, if it did, the school district could accommodate the increase due to a reduction in enrollment that has been experienced in San Francisco public schools.³

The proposed project would include approximately 64,000 GSF of enclosed publicly accessible open space as well as some exterior public areas. The project would not generate excessive demand on urban parks or other recreational facilities in the City. The project is not expected to have any direct effect on the maintenance of public facilities.

¹ Edward J. Phipps, Assistant Chief, Division of Support Services, San Francisco Fire Department, letter communication, January 12, 1984.

² Hal Waterman, Planning and Research, San Francisco Police Department, telephone communication, January 3, 1984.

³ San Francisco Unified School District, Proposal for Leasing and Selling Vacant Property, April 29, 1980, pages 28 and 29.

The proposed project would result in increased use of communication services. Pacific Telesis does not anticipate any difficulty in providing service to the new buildings. Renovation to the existing mall buildings and basement would require some rewiring of these buildings for communications purposes and the relocation of existing telephone rooms.¹

The proposed project would result in a net increase of water consumption at the site of about 35,000 gallons per day. The existing water mains that serve the existing buildings would be adequate to provide the required water supply to the proposed new construction. The San Francisco Water Department does not anticipate difficulty in serving the project.²

The amount of wastewater generated by the project (approximately 35,000 gallons per day) would be about the same as the water consumed. Existing sanitary sewer mains in the project area are adequate to transport the sanitary flows to the Richmond-Sunset treatment plant which has adequate capacity to handle these flows which are eventually discharged into the Pacific Ocean. If the Southwest Treatment Plant is built, sanitary flows from the project would be diverted to this facility. The Clean Water Department does not anticipate difficulty in serving the proposed project.³

The proposed project would generate about 1.7 tons of solid waste per day. The Sunset Scavenger Company currently removes solid waste from Stonestown, and does not anticipate problems in meeting the demands generated by the project. The Company transports the solid waste to a site in Altamont, Alameda County.⁴

There would be a net increase in the consumption of energy as a result of the proposed project. The project would meet (or exceed) the prescriptive standards

¹ Don Perazzo, Building Industry Consultant, Pacific Telesis, telephone communication, January 4, 1984.

² Cy Wentworth, Water Estimator, San Francisco Water Department, City Distribution Division, telephone communication, January 4, 1984.

³ Nat Lee, Clean Water Department, telephone communication, January 4, 1984.

⁴ Steve Barbegelata, Manager, Sunset Scavenger Company, telephone communication, January 4, 1984.

of Title 24 of the California Administrative Code for energy efficiency. The Pacific Gas and Electric Company does not foresee any problems in meeting the demands of the project.¹

In view of the above, all utilities and public services could serve the project with existing capabilities and this topic does not require further discussion in the EIR.

8. <u>Biology.</u> Could the project:	<u>YES</u>	<u>NO</u>	<u>DISCUSSED</u>
a. Substantially affect a rare or endangered species of animal or plant or the habitat of the species?	_____	<u>X</u>	<u>X</u>
b. Substantially diminish habitat for fish, wildlife or plants, or interfere substantially with the movement of any resident or migratory fish or wildlife species?	_____	<u>X</u>	<u>X</u>
c. Require removal of substantial numbers of mature, scenic trees?	_____	<u>X</u>	<u>X</u>

As most of the site is paved or developed, existing vegetation consists of landscaping, flowers, shrubs and trees placed by the sponsor. The primary animals that use the site are insects and birds that visit or inhabit the landscaped areas. No existing trees would be removed. The project would include landscaping outdoors and in the enclosed pedestrian mall area.

This topic requires no further discussion in the EIR.

9. <u>Geology/Topography.</u> Could the project:	<u>YES</u>	<u>NO</u>	<u>DISCUSSED</u>
a. Expose people or structures to major geologic hazards (slides, subsidence, erosion and liquefaction)?	_____	<u>X</u>	<u>X</u>
b. Change substantially the topography or any unique geologic or physical features of the site?	_____	<u>X</u>	<u>X</u>

The active San Andreas Fault lies about three miles southwest of the project site. The project site is classified as having a "very strong" intensity of

¹ Stu Tartatlia, Pacific Gas & Electric Company, telephone communication, October 17, 1983.

ground shaking in the event of a major earthquake. Moreover, conditions are probably present for liquefaction of the unconsolidated sandy soil during a major earthquake. (Source: Final Environmental Impact Report, Proposed Stonestown Shopping Center Renovation Project, San Francisco, California, EE76.74, certified October 14, 1976, pages 13 and 14).

The project would be constructed under the supervision of California-licensed structural and geotechnical engineers and would comply with all applicable seismic and life safety codes.

Grading and excavation for the new department store would generate soil and debris which would be removed by the contractor to an approved site in accordance with applicable regulations.

This topic requires no further discussion and will not be included in the EIR.

10. <u>Water</u> . Could the project:	<u>YES</u>	<u>NO</u>	<u>DISCUSSED</u>
a. Substantially degrade water quality, or contaminate a public water supply?	___	<u>X</u>	<u>X</u>
b. Substantially degrade or deplete ground water resources, or interfere substantially with ground water recharge?	___	<u>X</u>	<u>X</u>
c. Cause substantial flooding, erosion or siltation?	___	<u>X</u>	<u>X</u>

The project area is completely urbanized and most of it is covered with impervious surface. There is no surface water at the site. Runoff enters the storm sewer system, is collected into a trunk sewer, together with sanitary sewage, and passes into the Richmond-Sunset treatment plant. From there it is eventually discharged into the Pacific Ocean. (FEIR, EE76.74, page 14).

Section 2903.1 of the San Francisco Building Code requires that the construction site be maintained so that it does not create or constitute a hazard. Adjacent streets would be mechanically swept by the contractor so that silt would not be washed into the storm drains and dust would be removed.

This topic requires no further discussion in the EIR.

11. Energy/Natural Resources. Could the project:

	<u>YES</u>	<u>NO</u>	<u>DISCUSSED</u>
a. Encourage activities which result in the use of large amounts of fuel, water or energy, or use these in a wasteful manner?	<u> </u>	<u> X </u>	<u> X </u>
b. Have a substantial effect on the potential use, extraction, or depletion of a natural resource?	<u> </u>	<u> X </u>	<u> X </u>

There are no known natural resources on the site. This issue requires no further analysis and will not be addressed in the EIR. Project-generated and cumulative energy consumption impacts will be discussed in the EIR.

12. Hazards. Could the project:

	<u>YES</u>	<u>NO</u>	<u>DISCUSSED</u>
a. Create a potential public health hazard or involve the use, production or disposal of materials which pose a hazard to people or animal or plant populations in the area affected?	<u> </u>	<u> X </u>	<u> X </u>
b. Interfere with emergency response plans or emergency evacuation plans?	<u> </u>	<u> X </u>	<u> X </u>
c. Create a potentially substantial fire hazard?	<u> </u>	<u> X </u>	<u> X </u>

No hazardous substances are proposed for inclusion in the project, and no interference with emergency response plans or emergency evacuation plans would be expected. The project would increase building area and the number of persons using the site. This would not substantially increase the fire hazard at the site as the project would incorporate more extensive fire protection measures than the existing buildings on-site because of the more stringent standards of the Life Safety provisions of the San Francisco Building Code and of the State Building Code. Further, Stonestown Shopping Center's existing evacuation and emergency response plan would be amended to include the proposed project, by the project sponsor in consultation with the Mayor's Office of Emergency Services (see page 19). Therefore, it is not anticipated that the project would create a substantial fire hazard or emergency evacuation hazard and these will not be discussed in the EIR.

13. <u>Cultural</u> . Could the project:	<u>YES</u>	<u>NO</u>	<u>DISCUSSED</u>
a. Disrupt or adversely affect a prehistoric or historic archaeological site or a property of historic or cultural significance to a community or ethnic or social group; or a paleontological site except as a part of a scientific study?	<u> </u>	<u> X </u>	<u> X </u>
b. Conflict with established recreational, educational, religious or scientific uses of the area?	<u> </u>	<u> X </u>	<u> X </u>
c. Conflict with preservation of any buildings of City landmark quality?	<u> </u>	<u> X </u>	<u> X </u>

The Final Environmental Impact Report, Proposed Stonestown Shopping Center Renovation Project, San Francisco, California, EE76.74 (page 31) states, "A survey of archaeological site files showed that there are no known archaeological sites in the immediate vicinity of the proposed project. The San Francisco Landmarks Preservation Advisory Board has stated that it is unaware of any existing historical landmarks in the immediate vicinity of the site and that it is considered unlikely that any past events would result in the declaration of a historic landmark or site of historical interest in this area in the future". The project sponsor has included a mitigation measure should evidence of cultural or historic artifacts of significance be found during project excavation (see page 19 of this document).

This issue does not require discussion in the EIR.

C. <u>OTHER</u> . Could the project:	<u>YES</u>	<u>NO</u>	<u>DISCUSSED</u>
Require approval of permits from City Departments other than DCP or BBI, or from Regional, State or Federal agencies?	<u> X </u>	<u> </u>	<u> X </u>

Construction of the proposed access road, and the lowering of Winston Drive, would require authorization from the Department of Public Works, review by the Muni Railway and approval by the California Department of Transportation.

D. MITIGATION MEASURES.

YES NO N/A DISCUSSED

- | | | | | | |
|----|---|----------|---------------|---------------|----------------------|
| 1. | If any significant effects have been identified, are there ways to mitigate them? | <u>X</u> | <u> </u> | <u> </u> | <u> X </u> |
| 2. | Are all mitigation measures identified above included in the project? | <u>X</u> | <u> </u> | <u> </u> | <u> X </u> |

Mitigation measures currently proposed as part of the project are listed below. These measures, and possibly others will be included in the project EIR.

1. The project sponsor would require the general contractor to wet down demolition and construction areas at least twice a day to reduce dust generation by approximately 50 percent.

2. The project sponsor would follow the recommendations of California-licensed structural and geotechnical engineers in the design and construction of the project.

3. An evacuation and emergency response plan would be developed by project sponsor or building management staff, in consultation with the Mayor's Office of Emergency Services, to insure coordination between the City's emergency planning activities and the project's plan and to provide for building occupants in the event of an emergency. The project plan would be reviewed by the Office of Emergency Services and implemented by building management insofar as feasible before issuance by the Department of Public Works of final building permits.

4. Should evidence of cultural or historic artifacts of significance be found during project excavation, the Environmental Review Officer and the President of the Landmarks Preservation Advisory Board would be notified. The project sponsor would select an archaeologist or other expert to help the Office of Environmental Review determine the significance of the find and whether feasible measures, including appropriate security measures, could be implemented to preserve or recover such artifacts. The Environmental Review Officer would then recommend specific mitigation measures, if necessary, and recommendations would be sent to the State Office of Historic Preservation. Excavation or construction which might damage the discovered cultural resources would be suspended for a maximum of four weeks to permit inspection, recommendation and retrieval, if appropriate.

E. ALTERNATIVES

YES NO DISCUSSED

Were other alternatives considered?

X X

Several alternatives to the project are under consideration. These alternatives will be discussed in the project EIR.

Alternative 1, No Project: This alternative would retain Stonestown Shopping Center as it is today.

Alternative 2, Second Major Vehicular Access From West of Site: This alternative would add a second major vehicular entrance to Stonestown from Buckingham Way at the west side of the project.

Alternative 3, Alternative Department Store Location: Under this alternative the new department store would be located to the east of the existing mall, instead of on the west as proposed.

Alternative 4, Alternative Parking Garage Location: This alternative would locate the proposed parking garage on the east side of the existing mall, rather than west as proposed.

Alternative 5, No New Department Store: Under this alternative the project would consist primarily of enclosure of the mall and the addition of a new second floor retail area above the existing mall shops. Some additional parking would be provided. No new parking garage or major department store would be built.

F. MANDATORY FINDINGS OF SIGNIFICANCE

YES NO DISCUSSED

1. Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?

 X X

- | | | | | |
|----|---|-------|----------|----------|
| 2. | Does the project have the potential to achieve short-term, to the disadvantage of long-term, environmental goals? | _____ | <u>X</u> | _____ |
| 3. | Does the project have possible environmental effects which are individually limited, but cumulatively considerable? | _____ | <u>X</u> | <u>X</u> |
| 4. | Would the project cause substantial adverse effects on human beings, either directly or indirectly? | _____ | <u>X</u> | <u>X</u> |
| 5. | Is there a serious public controversy concerning the possible environmental effect of this project? | _____ | <u>X</u> | _____ |

The potential environmental effects of the project related to compatibility with existing zoning and plans, visual quality, transportation, air quality, construction noise and energy require discussion in an EIR.

G. ON THE BASIS OF THIS INITIAL STUDY:

_____ I find the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared by the Department of City Planning.

_____ I find that although the proposed project could have a significant effect on the environment, there WILL NOT be a significant effect in this case because the mitigation measures, numbers _____, in the discussion have been included as part of the proposed project. A NEGATIVE DECLARATION will be prepared.

✓ _____ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

Alec S. Bash
Alec S. Bash
Environmental Review Officer

for

Date: _____

4/17/84

Dean L. Macris
Director of Planning

DISTRIBUTION
FEDERAL AND STATE AGENCIES:

California Dept. of Transport.
Public Transportation Branch
P. O. Box 7310
San Francisco, CA 94120
Attn: Larry Layne

Bay Area Air Qual. Mgmt. Dist.
939 Ellis Street
San Francisco, CA 94109
Attn: Irwin Mussen

Mayor's Economic Devel. Council
100 Larkin Street
San Francisco, CA 94102
Attn: Mr. Bill Witte, Director

San Francisco Comm. for Util. Liai-
son on Constr. & other proj. (CULCOP)
Room 363, City Hall
San Francisco, CA 94102
Attn: Mr. Joseph Corollo

San Francisco Municipal Railway
MUNI Planning Division
949 Presidio Ave., Rm. 204
San Francisco, CA 94115
Attn: Peter Straus

GROUPS AND INDIVIDUALS:

Bendix Environmental
Research, Inc.
1390 Market Street, Ste. 902
San Francisco, CA 94102

DKS Associates
1419 Broadway, Ste. 700
Oakland, CA 94612-2069

The Emporium
835 Market Street
San Francisco, CA 94103
Attn: G. Paulsen

Environ. Science Associates
1291 E. Hillsdale Blvd.
Foster City, CA 94404
Attn: Jo Julin

California Archaeo. Site Survey,
Regional Office, N.W. Info. Center
Department of Anthropology
Sonoma State University
Rohnert Park, CA 94928

REGIONAL AGENCIES:

CITY AND COUNTY OF SAN FRANCISCO:

Public Utilities Commission
949 Presidio Ave., Rm. 150
San Francisco, CA 94115
Attn: Tom Jordan, Director
Bureau Services

San Francisco Dept. Public Works
Traffic Engineering Division
460 McAllister Street
San Francisco, CA 94102
Attn: Scott Shoaf

San Francisco Real Estate Dept.
450 McAllister St., Rm. 600
San Francisco, CA 94102
Attn: Mr. Wallace Wortman
Director of Property

AIA
San Francisco Chapter
790 Market Street
San Francisco, CA 94102

Coalition for San Francisco
Neighborhoods
Mrs. Dorice Murphy
175 Yukon Street
San Francisco, CA 94114

Downtown Association
582 Market Street
San Francisco, CA 94105
Attn: Mr. Lloyd Pflueger

Environmental Impact Planning
319 Eleventh Street
San Francisco, CA 94103
Attn: Susanne McAdams

Greater W. Portal Neighborhood Assn.
419 Vicente Street
San Francisco, CA 94127
Attn: Mr. Howard Strassner

Calif. Depart. of Transport.
Business & Transport. Agency
P. O. Box 7310
San Francisco, CA 94120
Attn: Darnall W. Reynolds

Association of Bay Area Gov'ts
Hotel Claremont
Berkeley, CA 94705

Bureau of Building Inspection
450 McAllister Street
San Francisco, CA 94120
Attn: Robert Levy, Superint.

Public Utilities Commission
Bureau of Energy Conservation
949 Presidio Ave., Rm. 111
San Francisco, CA 94115
Attn: Barbara Moy, Asst. Dir.

San Francisco Fire Department
260 Golden Gate Avenue
San Francisco, CA 94102
Attn: Ed Philipps, Chief
Division of Planning & Research

Water Department
Distribution Division
425 Mason Street
San Francisco, CA 94102
Attn: George Nakagaki, Manager

Bay Area Council
348 World Trade Center
San Francisco, CA 94111

Doris Dawdy
3055 23rd Avenue
San Francisco, CA 94132

Michael Dyett
Blayney-Dyett
70 Zoe Street
San Francisco, CA 94103

Environ. Planning & Research, Inc.
649 Front Street
San Francisco, CA 94111
Attn: Leslie de Boer

Sue Hester
4536 - 20th Street
San Francisco, CA 94114

Lakeshore Acres Imprvmt. Club
110 Inverness Drive
San Francisco, CA 94132
Attn: William L. Fazio, Pres.

Lakeside Vlg. Merchants Assn.
2633 Ocean Avenue
San Francisco, CA 94132
Attn: Jane Gleason, Pres.

Parkmerced Residents Organiz.
32 Bucarelli Drive
San Francisco, CA 94132
Attn: Lee Cowan, Chairman

Planning Analysis & Dev.
530 Chestnut Street
San Francisco, CA 94133

San Francisco Chamber of Commerce
465 California Street
San Francisco, CA 94105
Attn: Richard Morten

San Francisco Labor Council
1855 Folsom Street
San Francisco, CA 94103
Attn: Bernard Speckman

SPEAK
Mrs. R. Brandon, Pres.
524 Moraga Street
San Francisco, CA 94122

Taraval-Parkside Merch. Assoc.
2017 Taraval Street
San Francisco, CA 94116
Attn: Mr. Wm. Silsman, Pres.

MEDIA:

San Francisco Examiner
110 Fifth Street
San Francisco, CA 94103
Attn: Laura Itow

San Francisco Examiner
110 - Fifth Street
San Francisco, CA 94103
Attn: Gerald Adams

Ingleside Terrace
Homeowners Association
150 De Soto Street
San Francisco, CA 94127
Attn: Ron Hummel, Pres.

Lakeside Homeowners Assn.
64 Woodacre Drive
San Francisco, CA 94132
Attn: Edward Reldy, Pres.

Ocean Avenue Merchants Assn.
1552 Ocean Avenue
San Francisco, CA 94112
Attn: Patricia Vaughney, Pres.

Parkside District
Improvement Club, Inc.
2187 - 40th Avenue
San Francisco, CA 94116
Attn: Wm. R. Marquering, Pres.

San Francisco Beautiful
41 Sutter Street
San Francisco, CA 94104
Attn: Mrs. H. Klussman, Pres.

San Francisco Convention &
Visitors Bureau
1390 Market Street, Ste. 260
San Francisco, CA 94102
Attn: George D. Kirkland, Ex.Dir.

San Francisco Planning & Urban
Research Association
312 Sutter Street
San Francisco, CA 94108

Stonestown Merchants
Association, Inc.
20 Stonestown Mall
San Francisco, CA 94116
Mr. Steve Welinger, Pres.

West Portal Ave. Assoc.
69 West Portal Avenue
San Francisco, CA 94127
Attn: Mark A. Shustoff, Pres.

San Francisco Bay Guardian
2700 - 19th Street
San Francisco, CA 94110
Patrick Douglas, City Editor

San Francisco Progress
851 Howard Street
San Francisco, CA 94103
Attn: E. Cahill Maloney

Steve Ishino
Menlo Trading Company
25 Ingold Road
Burlingame, CA 94010

Lakeside Property Owners Assn.
846 Junipero Serra Blvd.
San Francisco, CA 94127
Attn: Ruth Lanier, Pres.

Ocean View, Merced, Ingleside
Comm. Association
141 Thrift Street
San Francisco, CA 94112
Attn: Mr. I. T. Bookman, Pres.

Kay Patchner
Consumer Action
1417 Irving Street
San Francisco, CA 94122

San Francisco Bldg. & Constr.
Trades Council
400 Alabama Street, Room 100
San Francisco, CA 94110
Attn: Stanley Smith

San Francisco Junior
Chamber of Commerce
251 Kearny Street
San Francisco, CA 94104

John Sanger & Associates
2340 Market Street
San Francisco, CA 94114

St. Francis Homes Assoc.
180 Santa Clara Ave.
San Francisco, CA 94127
Attn: Forrest N. Faulkner, Pres.

Melba Yee, Dep. City Attorney
City Attorney's Office
Room 206, City Hall
San Francisco, CA 94102

San Francisco Chronicle
925 Mission Street
San Francisco, CA 94103
Attn: Evelyn Hsu

SFRG
241 Bartlett
San Francisco, CA 94110

ADJACENT PROPERTY OWNERS:

7215-5
Aurelio P. & Jo G. Silvestri
3090 23rd Avenue
San Francisco, CA 94132

7216-12
Elsie M. McCormick
460 Eucalyptus Drive
San Francisco, CA 94132

7219-4A
K. L. & A.T.C. Hu
Merchant Realty
283 12th Avenue
San Francisco, CA

7231-1
Robert J. Ruppert
3210 19th Avenue
San Francisco, CA 94132

7231-8
Jewel M. Brooks
100 Stonecrest Drive
San Francisco, CA 94132

7231-11
Charles A. DiCristina
136 Stonecrest Drive
San Francisco, CA 94132

7231-14
Martin & Mary G. Ruane
158 Stonecrest Drive
San Francisco, CA 94132

7231-17
Tung Tick Hong
88 Rossmoor Drive
San Francisco, CA 94132

7236-1
City of San Francisco
222 Stonecrest Drive
San Francisco, CA 94132

7236-5
Harry & Georgia Manetas
238 Stonecrest Drive
San Francisco, CA 94132

7217-4
George Y. & Amy J. Luo
3089 21st Avenue
San Francisco, CA 94132

7216-10
Aime E. Sommer
400 Eucalyptus Drive
San Francisco, CA 94132

7218-5B
Fred & Tackla Muzlo
300 Eucalyptus Drive
San Francisco, CA 94132

7219-4B
William P. Murphy
222 Eucalyptus Drive
San Francisco, CA 94132

7231-1C
Dorothy K. Kraul
95 Rossmoor Drive
San Francisco, CA 94132

7231-9
Thomas F. & Patricia A. Hayes
120 Stonecrest Drive
San Francisco, CA 94132

7231-12
Fouad & Mimi B. Malouf
144 Stonecrest Drive
San Francisco, CA 94132

7231-15
Chun Ting Hsian
164 Stonecrest Drive
San Francisco, CA 94132

7231-18
Mitchell C. & Harriet Solliod
186 Stonecrest Drive
San Francisco, CA 94132

7236-3
John & Lavonne Arata
222 Stonecrest Drive
San Francisco, CA 94132

7236-6
Ralph V. & Jane E. Brown
246 Stonecrest Drive
San Francisco, CA 94132

7215-4B
Alfred R. & Donna Young
1867 Mission St.
San Francisco, CA

7216-11
Goldie E. Willey
430 Eucalyptus Drive
San Francisco, CA 94132

7218-6
Geraldine R. Lineger
3090 21st Avenue
San Francisco, CA 94132

7219-10
C. C. & Irene Chiang
3090 20th Avenue
San Francisco, CA 94132

7231-3
Mercy High School
3250 19th Avenue
San Francisco, CA 94132

7231-10
Hazel Klein
128 Stonecrest Drive
San Francisco, CA 94132

7231-13
John C. & Alice C. Hightower
152 Stonecrest Drive
San Francisco, CA 94132

7231-16
Edward A. Fitzgerald
170 Stonecrest Drive
San Francisco, CA 94132

7231-19
Thuy Trung Thai
194 Stonecrest Drive
San Francisco, CA 94132

7236-4
Desmond & Evelyn Fitzgerald
230 Stonecrest Drive
San Francisco, CA 94132

7236-7
Natalie Rokusek
254 Stonecrest Drive
San Francisco, CA 94132

7295-2
Temple Baptist Church
3355 19th Avenue
San Francisco, CA 94132

7295-15
Roman Catholic Archbishop
of San Francisco
St. Stephens Church
601 Eucalyptus Drive
San Francisco, CA 94132

7295-10
Roman Catholic Archbishop
of San Francisco
601 Eucalyptus Drive
San Francisco, CA 94132

7295-18
Roman Catholic Welfare
Corporation of San Francisco
601 Eucalyptus Drive
San Francisco, CA 94132

7298-6
City of San Francisco
3177 19th Avenue
San Francisco, CA 94132

7236-8
Hilday Lai
262 Stonecrest Drive
San Francisco, CA 94132

7295-14
YMCA TR
220 Golden Gate Avenue
San Francisco, CA

7295-8
Hellen F. Altel
501 Eucalyptus Drive
San Francisco, CA 94132

7295-11
Roman Catholic Archbishop
of San Francisco
601 Eucalyptus Drive
San Francisco, CA 94132

7295-20
Stoneson Development Corp.
3150 20th Avenue
San Francisco, CA 94132

7298-7
San Francisco Unified
School District
3711 19th Avenue
San Francisco, CA 94132

7295-1
Col City Lakeside
Presbyterian Church
201 Eucalyptus Drive
San Francisco, CA 94132

7295-16
City of San Francisco
St. Stephens Church
601 Eucalyptus Drive
San Francisco, CA 94132

7295-9
Roman Catholic Archbishop
of San Francisco
601 Eucalyptus Drive
San Francisco, CA 94143

7295-17
Roman Catholic Welfare
Corporation of San Francisco
601 Eucalyptus Drive
San Francisco, CA 94132

7296-4
Stoneson Development Corp.

TABLE B-1
EXISTING AND PROPOSED BUILDING AREAS

	<u>Gross Floor Area a/</u> (square feet)		<u>Occupied Floor Area b/</u> (square feet)		<u>Gross Leasable Area c/</u> (square feet)	
	<u>Existing</u>	<u>Proposed</u>	<u>Existing</u>	<u>Proposed</u>	<u>Existing</u>	<u>Proposed</u>
<u>Pedestrian Circulation</u>						
• Mall Level	0	44,345 d/	0	44,345	-	-
• Mezzanine/Second Level	7,595	37,328	7,595	37,328	-	-
<u>Pedestrian Circulation Subtotal</u>	<u>7,595</u>	<u>81,673</u>	<u>7,595</u>	<u>81,673</u>	-	-
<u>Mall Buildings</u>						
• Basement	126,490 e/	169,618 f/	9,362	159,420	110,512	8,580
• Mall	159,932	177,380	115,415	168,891	157,994	152,207
• Mezzanine/Second g/	56,553	140,422	28,701	135,999	42,569	138,157
<u>Mall Buildings' Subtotal</u>	<u>342,975</u>	<u>487,420</u>	<u>153,478</u>	<u>464,310</u>	<u>311,075</u>	<u>298,962</u>
<u>Department Stores</u>						
• Emporium	280,257	280,257	187,801	187,801	288,925	288,925
• Former Bullock's	146,195	146,195	96,310	96,310	148,170	148,170
• Proposed New Department Store	-	148,000	-	97,500	-	150,000
<u>Department Store Subtotal</u>	<u>426,452</u>	<u>574,452</u>	<u>284,111</u>	<u>381,611</u>	<u>437,095</u>	<u>587,095</u>
<u>Other Buildings</u>						
• Former Joseph Magnin	34,354	34,354	23,021	23,021	35,417	35,417
• Grocery Market Building	77,212	77,212	51,740	51,740	79,600	79,600
• Standard Oil	1,164	1,164	780	780	1,200	1,200
• Grand Auto	3,502	3,502	2,347	2,347	3,610	3,610
• Imperial Savings and Loan	3,783	3,783	2,535	2,535	3,900	3,900
• Theater	12,901	12,901	8,645	8,645	13,300	13,300
• Administrative Building	14,436	14,436	10,063	10,063	14,883	14,883
• Medical Building	108,256	108,256	74,678	74,678	111,604	111,604
<u>Other Buildings' Subtotal</u>	<u>255,608</u>	<u>255,608</u>	<u>173,809</u>	<u>173,809</u>	<u>263,514</u>	<u>263,514</u>
<u>Parking Garages</u>						
• Existing Garage	227,224	227,224	224,224	224,224	-	-
• Proposed Garage	-	330,666	-	245,000	-	-
<u>Parking Garage Subtotal</u>	<u>227,224</u>	<u>557,890</u>	<u>224,224</u>	<u>469,224</u>	-	-
<u>TOTAL ON-SITE DEVELOPMENT</u>	<u>1,259,854</u>	<u>1,957,043</u>	<u>843,217</u>	<u>1,570,627</u>	<u>1,011,684</u>	<u>1,149,571</u>

Source: Stoneson Development Corporation and Field/Gruzen, August 1, 1985, November 5, 1985, and January 9, 1986.

a/ As defined by the City Planning Code, Section 102.8. This area is used to compute floor area ratio (FAR) and traffic generation of office uses.

b/ As defined by the City Planning Code, Section 102.9. This area is used to compute off-street parking requirements.

c/ Not defined by the City Planning Code but used to compute traffic generation for commercial uses. (Traffic generation of office uses is based on gross floor area.)

d/ Consists of 21,000 square feet of new construction plus 23,345 square feet of existing mall level retail area to be converted to pedestrian circulation use.

e/ Includes 97,138 square feet of existing warehouse area which would be converted (together with 29,352 square feet of basement loading and retail space) to parking for 350 cars with the proposed project.

f/ The difference in area between existing and proposed conditions is due to the area definitions and how existing and proposed space would be counted. No new area would be created, such as by excavation.

g/ Includes existing offices (approximately 13,703 square feet of gross floor area and 14,127 square feet of gross leasable area) plus retail and storage area, all of which would be removed for the second floor addition.

TABLE B-2
PARKING SUMMARY

<u>Lot</u>	<u>Location</u>	<u>Existing Spaces</u>	<u>Spaces Without Restriping</u>	<u>Proposed Project With Restriping</u>	<u>Net Change^{a/}</u>	<u>Standard Spaces</u>	<u>Compact Spaces</u>
A	Administrative Offices	24	24	24	0	24	-
B	Medical Building	81	81	81	0	81	-
C	Buckingham Way	34	34	34	0	34	-
D	Northwest Corner Buckingham Way	546	546	635	+89	385	250
E	West of Emporium	472 } 754	560 ^{b/}	349 ^{c/}	-405	199	150
F	West of Mall	282 }	341	367	+26	242	125
G	South of Winston Drive	341	732	788	+56	449	339
H	East of Mall	732	670	670	0	670	-
I	Existing Garage	670					
-	Proposed Garage	-	-	1,040	+1,040	624	416
-	Proposed Basement Garage	-	-	350	+350	210	140
<u>Off-Street Parking Subtotal</u>		<u>3,182</u>	<u>2,988</u>	<u>4,338</u>	<u>+1,156</u>	<u>2,918</u>	<u>1,420</u>
<u>On-Street Parking</u>		<u>132</u>	<u>132</u>	<u>132</u>	<u>0</u>	<u>132</u>	<u>-</u>
<u>(Winston Drive and Buckingham Way) ^{d/}</u>							
<u>TOTAL ON-SITE PARKING</u>		<u>3,314</u>	<u>3,120</u>	<u>4,470</u>	<u>+1,156</u>	<u>3,050</u>	<u>1,420</u>

Source: Stoneson Development Corporation and Field/Gruzen

^{a/} Net change between existing conditions and proposed project with restriping.

^{b/} The proposed department store would eliminate 194 spaces (754 existing - 560 proposed without restriping = 194 spaces lost).

^{c/} These spaces would be provided in the surface lot adjacent to the proposed garage. The garage footprint would cover 260 existing spaces. (Those 260 spaces are included in the Lot E total [754 spaces] of existing spaces and Lot E total [560 spaces] of spaces without proposed restriping. The 260 grade level spaces are included in the parking garage total [1,040 spaces] for the proposed project [780 new and 260 existing spaces].)

^{d/} Approximately 35 off-site, on-street spaces on Nineteenth Avenue would be removed to provide the proposed left-turn pocket at the new entrance to the site on Nineteenth Avenue midway between Eucalyptus Drive and Winston Drive.

APPENDIX B -- PROJECT DESCRIPTION

**TABLE B-3
EMPLOYMENT**

<u>Labor Category</u>	<u>Existing Employment a/</u>	<u>Maximum Employment b/</u>	<u>Jobs Lost</u>	<u>Estimated New Jobs</u>	<u>Future Employment</u>
Retail c/	901 d/	1,243	0	680 e/	1,923
Office f/	298	298	71 g/	0	227
Service h/	18	18	0	0	18
<u>Total Employment</u>	<u>1,217</u>	<u>1,559</u>	<u>71</u>	<u>680</u>	<u>2,168</u>

Source: Stoneson Development Corporation and Nichols • Berman

a/ As of April, 1985. Vacancies affect employment two ways. Store closures have eliminated on-site jobs at these businesses. In addition, Stoneson Development Corporation does not require that stores remain open three nights per week (which was required when the complex was occupied fully. Longer business hours result in more total jobs than under present conditions. Idamay Brewster, Stoneson Development Corporation, telephone conversation, July 8, 1985.

b/ Full occupancy, assuming no vacancies. Based on number of people employed by the last tenant in the location. Ibid.
c/ Includes mall stores, Buckingham Way stores and businesses, and grocery market building (south of Winston Drive), and Standard Oil Station. Ibid.

d/ One business has closed since the April, 1985 employment census was taken (The Junior Boot Shop, June 30, 1985). Using the general rule-of-thumb of one employee per 300 to 600 square feet of floor space, that store could have employed two to three people who were included in this total. Economic Practices Manual, A Handbook for Preparing Economic Impact Assessments, Office of Planning and Research, State of California, 1978, page 37.

e/ Based on 305,870 square feet of gross floor area (157,870 square feet of first and second level mall retail area and 148,000 square feet in the new department store), not including the non-commercial garage area proposed for construction (248,000 average of 300 to 600 square feet, above, in Footnote d/).

f/ Includes mall mezzanine office (±71 employees), medical building (210 employees), and Stoneson Development Corporation (17 employees).

g/ Jobs lost due to demolition of mall mezzanine offices.

h/ Stoneson Development Corporation employees: security (15) and gardeners (3). Another 35 Stoneson employees are assigned primarily to the residential areas south and west of Stonestown Shopping Center.

APPENDIX C -- TRANSPORTATION
TRIP GENERATION DOCUMENTATION

Determination of Trip Generation Rates

A. Shopping Center (ITE Land Use Code 826, rates are trips per 1,000 gross square feet of leaseable area.)

1.) Daily Trip Rate = 37.2

P.M. Peak Hour of Adjacent Street Traffic = 1.59 In/1.65 Out

P.M. Peak Period of Adjacent Street Traffic = P.M. Peak Hour x 2
= 3.18 In/3.30 Out

Saturday Peak Hour = 2.30 In/2.35 Out

2.) Conversion of ITE vehicle trip rates to person trip rates.

Assumptions: a) ITE rates are based "primarily on suburban locations where there is little or no public transportation..." "No information is available regarding the amount of transit usage or walk-ins." (ITE, "Using the ITE Trip Generation Report," July, 1984, page 15.)

b) Average vehicle occupancy of trips to shopping centers is 1.8 persons per vehicle. (Urban Land Institute, Shared Parking, 1983.)

Calculation of Person Trip Rates:

Daily Trip Rate = $1.8 \times 37.2 = 67.0$

P.M. Peak Hour of Adjacent Street Traffic = 1.8×1.59 In/ 1.8×1.65 Out
= 2.86 In/2.97 Out

P.M. Peak Period of Adjacent Street Traffic = P.M. Peak Hour x 2
= 5.72 In/5.94 Out

Saturday Peak Hour = 1.8×2.30 In/ 1.8×2.35 Out
= 4.14 In/4.23 Out

3.) Modal split for Stonestown Shopping Center Trip Ends based on shopper surveys conducted by Stoneson Development in 1973 and 1976, the following modal split was observed:

Auto	81%
Transit	8%
Pedestrian	<u>11%</u>
Total	100%

4.) Modal Trip Rates for Stonestown Shopping Center

Transit trip rate = 8% of person trip rates in 2) above,

Pedestrian trip rate = 11% of person trip rates in 2) above,

Auto trip rate = $\frac{(\text{Person trip rate}) - (\text{Transit trip rate}) - (\text{Pedestrian trip rate})}{(1.8 \text{ persons/auto})}$

	<u>Transit</u>	<u>Pedestrian</u>	<u>Auto</u>
Daily Trip Rate	5.36	7.37	30.2
P.M. Peak Hour (4:30-5:30 p.m.)	.23 In/.24 Out	.31 In/ .33 Out	1.29 In/1.33 Out
P.M. Peak Period (4:00-6:00 p.m.)	.46 In/.48 Out	.63 In/.65 Out	2.57 In/2.67 Out
Saturday Peak Hour (2:00-3:00 p.m.)	.33 In/.34 Out	.46 In/.47 Out	1.86 In/1.90 Out

B. Office (ITE Land Use Code 710, rates are trips per 1,000 gross square feet)

1.) Daily Trip Rate = 12.3

P.M. Peak Hour of Adjacent Street Traffic = .36 In/1.84 Out

P.M. Peak Period of Adjacent Street Traffic = P.M. Peak Hour x 1.65

= .59 In/3.04 Out

(Adjustment factor of 1.65 based on typical office peaking characteristics.)

Saturday Peak Hour = .27 In/.23 Out

2.) Obtain modal split and average vehicle occupancy data from South of Market Area survey. (City and County of S.F., Dept. of City Planning, "Guidelines for Environmental Review: Transportation Impacts," September, 1983, page 19.)

Primary Transportation Mode: Journey to Work South of Market Area Workers

<u>Mode</u>	<u>% of Total</u>	<u>Assumptions for Stonestown Office Uses</u>
Drive alone	47.0	
Carpool	16.3	
Vanpool	1.1	
Muni	14.8	
BART	8.7	
AC Transit	3.4	will use BART
Sam trans	1.1	
Charter/Club Bus	.8	will use auto
Southern Pacific	1.9	will use auto
GG Bus	2.0	will use auto
GG Ferry	.5	will use auto
Tiburon Ferry	0	
Jitney	.2	will use muni
Motorcycle	.2	will use auto
Bicycle	.9	will use auto
Walk	.9	will use auto
Taxi	.3	will use auto

Assume distribution of new auto person trips would be in same proportion as auto alone/shared ride figures above:

Auto alone = 47.0%

Shared ride = Carpool + Vanpool = 16.3 + 1.1 = 17.4%

$47.0 + 17.4 = 64.4$

$47.0 / 64.4 = 73\%$

$17.4 / 64.4 = 27\%$

Therefore, of the 7.5% in new auto trips assumed for Stonestown office uses on page 3, 73% (or 5.5% of total person trips) will be via auto along made, and 27% (or 2.0% of total person trips) will be via carpool or vanpool.

Resulting modal split is as follows:

Auto alone	52.5%
Carpool/vanpool	19.4
Transit	<u>28.1</u>
	100.0%

(Auto Alon + Carpool/Vanpool = 52.5 + 19.4 = 71.9%)

Assuming 2.5 persons per vehicle for carpools and vanpools (based on professional experience and judgement), then the average vehicle occupancy would be determined as follows:

$(19.4 \times 2.5) + 52.5 = 101$ person trips
101 person trips = 1.4 persons per vehicle
 71.9 vehicles

3.) Conversion of ITE vehicle trip rates to person trip rates

- Assumptions:
- a) ITE rates are based "primarily on suburban locations where there is little or no public transportation." "No information is available regarding the amount of transit usage or walk-ins." (ITE, "Using the ITE Trip Generation Report," July, 1984, page 15.)
 - b) Average vehicle occupancy of trips to Stonestown office uses is 1.4 persons per vehicle. (See 2) above.)

Calculation of Person Trip Rates:

Daily Trip Rate = $1.4 \times 12.3 = 17.22$

P.M. Peak Hour of Adjacent Street Traffic = $1.4 \times .36$ In / 1.4×1.84 Out
 = .50 In / 2.58 Out

P.M. Peak Period of Adjacent Street Traffic = $1.4 \times .59$ In / 1.4×3.04 Out
 = .83 In / 4.26 Out

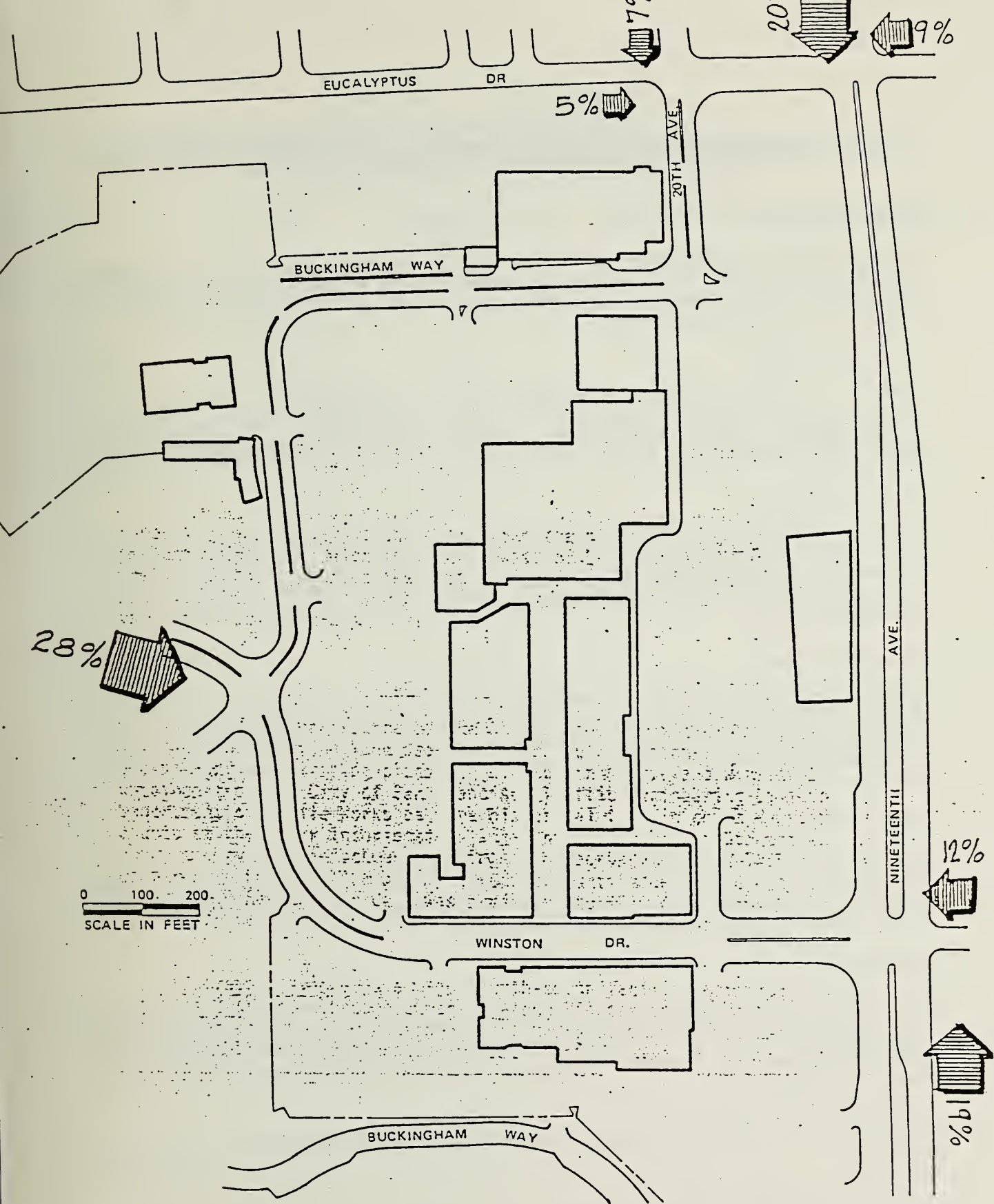
Saturday Peak Hour = $1.4 \times .27$ In / $1.4 \times .23$ Out
 = .38 In / .32 Out

4.) Modal Trip Rates for Stonestown Office Uses

Transit trip rate = 28.1% of person trip rates in 3)

Auto trip rate = $\frac{(\text{Person trip rate}) - (\text{Transit trip rate})}{(1.4 \text{ persons/auto})}$

	<u>Transit</u>	<u>Auto</u>
Daily Trip Rate	4.84	8.84
P.M. Peak Hour (4:30-5:30 p.m.)	.14 In/.72 Out	.26 In/1.33 Out
P.M. Peak Period (4:00-6:00 p.m.)	.23 In/1.20 Out	.43 In/2.19 Out
Saturday Peak Hour (2:00-3:00 p.m.)	.11 In/.09 Out	.19 In/.16 Out



DIRECTIONS OF APPROACH

STONESTOWN SHOPPING CENTER

FIGURE C-1

1/

APPENDIX C -- TRANSPORTATION
LEVEL OF SERVICE DEFINITIONS FOR SIGNALIZED INTERSECTIONS

Level of Service A

Level of Service A describes a condition where the approach to an intersection appears quite open and turning movements are made easily. Little or no delay is experienced. No vehicles wait longer than one red traffic signal indication. The traffic operation can generally be described as excellent.

Level of Service B

Level of Service B describes a condition where the approach to an intersection is occasionally fully utilized and some delays may be encountered. Many drivers begin to feel somewhat restricted within groups of vehicles. The traffic operation can generally be described as very good.

Level of Service C

Level of Service C describes a condition where the approach to an intersection is often fully utilized and back-ups may occur behind turning vehicles. Most drivers feel somewhat restricted, but not objectionably so. The driver occasionally must have to wait more than one red traffic signal indication. The traffic operation can generally be described as good.

Level of Service D

Level of Service D describes a condition of increasing restriction causing substantial delays and queues of vehicles on approaches to the intersection during short times within the peak period. However, there are enough signal cycles with lower demand such that queues are periodically cleared, thus preventing excessive back-ups. The traffic operation can generally be described as fair.

Level of Service E

Capacity occurs at Level of Service E. It represents the most vehicles that any particular intersection can accommodate. At capacity there may be long queues of vehicles waiting upstream of the intersection and vehicles may be delayed up to several signal cycles. The traffic operation can generally be described as poor.

Level of Service F

Level of Service F represents a jammed condition. Back-ups from locations downstream or on the cross street may restrict or prevent movement of vehicles out of the approach under consideration. Hence, volumes of vehicles passing through the intersection vary from signal cycle to signal cycle. Because of the jammed condition, this volume would be less than capacity.

¹City and County of San Francisco, Department of Public Works, Traffic Engineering Division.

APPENDIX C -- TRANSPORTATION
TABLE C-2
PARKING OCCUPANCY OF 35 UNMARKED SPACES ON NINETEENTH AVENUE
BETWEEN WINSTON AND EUCALYPTUS DRIVES

<u>Date</u>	<u>Time</u>	<u>Number of Cars Parked</u>	<u>Number Arrivals</u>	<u>Number Departures</u>
July 25, 1985	3:50 P.M.	14	N/A	N/A
	4:50 P.M.	13	0	1
	5:50 P.M.	7	0	6
July 31, 1985	4:30 P.M.	10	N/A	N/A
	5:00 P.M.	10	0	0
	6:00 P.M.	4	0	6

Source: Barton-Aschman Associates, Inc., license plate surveys, July 25 and 31, 1985.

SHOPPING CENTER EXPANSION TRIP GENERATION RATE

Barton-Aschman Associates' research on file with the San Francisco Department of City Planning indicates that shopping center expansion space typically generates traffic at a lower rate than the existing retail space. This discount has been documented as high as 40% for previous expansions. (Example: existing 900,000 square feet of shopping center generates traffic at 40 trips/1,000 square feet. The 300,000-square foot expansion would add only 60% of 40 trips/1,000 square feet or 24 trips/1,000 square feet.)

This discount was not included in this traffic impact analysis because the size of the expansion was small in relation to the amount of existing space. To make sure that this assumption (i.e., not including the discount) does not affect study results by overestimating traffic levels, the following analysis was performed:

Trip Generation Rate

	<u>EIR</u>	<u>Reduction Factor</u>	<u>Expansion Reduced Generation</u>
ADT	37.2 trips/1,000 sf	x 0.60 =	22.32 trips/1,000 sf
P.M. Peak Hour In	1.59 trips/1,000 sf	x 0.60 =	0.95 trips/1,000 sf
P.M. Peak Hour Out	1.65 trips/1,000 sf	x 0.60 =	0.99 trips/1,000 sf

Trip generation rates similarly can be reduced to account for transit levels, although the Urban Land Institute report on Regional Shopping Center Parking indicates that the transit patronage to Stonestown is not high enough to warrant a reduction in parking supply on-site. a/

	<u>ITE</u>	<u>Reduced for Expansion</u>	<u>Reduced for Transit</u>	<u>Reduced for Expansion & Transit Combined</u>
ADT	32.2	22.32	30.2	13.84
P.M. Peak In	1.59	0.95	1.29	0.59
P.M. Peak Out	1.65	0.99	1.33	0.61

(all rates shown are in trips/1,000 square feet of gross leasable area)

Proposed Project

Existing	863,000 square feet
Future Expansion	+138,000 square feet
<u>Total</u>	1,001,000 square feet

Trip Generation (with reduction for both transit and expansion)

ADT	(863 x 30.2) + (138 x 13.84) = 27,970 vehicles/day
P.M. Peak In	(863 x 1.29) + (138 x 0.59) = 1,195 vehicles/day
P.M. Peak Out	(863 x 1.33) + (138 x 0.61) = 1,235 vehicles/day

Trip Generation

	<u>Without Reduction</u>	<u>With Reduction</u>	<u>Difference</u>
ADT	30,230	27,970	2,260 vehicles/day
P.M. Peak In	1,290	1,195	95 vehicles/hour
P.M. Peak Out	1,330	1,235	95 vehicles/hour

Thus, the application of both reduction factors would reduce P.M. peak hour trip generation estimates by 95 inbound vehicles per hour and 95 outbound vehicles per hour.

Reduction Impact

To evaluate the impacts of this 95 inbound vph trip reduction, the direction of approach analysis was reviewed, and the following reductions result:

<u>Street</u>	<u>Location</u>	<u>Inbound Shopping Center Traffic Direction</u>	<u>Reduction</u>
19th Avenue	N of Eucalyptus	SB	19
19th Avenue	S of Winston	NB	18
Eucalyptus	W of 20th	EB	4
Eucalyptus	E of 19th	WB	9
Winston	W of Buckingham	EB	24
Winston	E of Buckingham	WB	11
<u>Total</u>			<u>95</u>

Evaluate impact of above reductions:

Southbound 19th Avenue

$$\% \text{ reduction traffic} = \frac{19 \text{ vph difference}}{2,015 \text{ vph existing}} = 0.9\% \text{ reduction}$$

$$\% \text{ reduction in intersection volume/capacity ratio} = \frac{\frac{19 \text{ vph difference}}{3 \text{ lanes}}}{1,600 \text{ vph lane capacity}} = 0.004 \text{ reduction}$$

Eastbound Winston

$$\% \text{ reduction traffic} = \frac{24}{100} = 24\%$$

$$\% \text{ reduction in intersection volume/capacity ratio} = \frac{\frac{24 \text{ vph difference}}{2 \text{ lanes}}}{1,600 \text{ vph lane capacity}} = 0.008 \text{ difference}$$

The difference in trip generation between discounted and non-discounted estimates is not large enough to affect calculation results or required mitigation measures.

a/ Wilbur Smith and Associates, Parking Requirements for Shopping Centers: Summary Recommendations and Research Study Report, Urban Land Institute, 1982.

STONESTOWN SHOPPING CENTER ESTIMATE OF SATURDAY IMPACTS

An estimate of the incremental impacts of expansion project traffic on Saturday traffic conditions was made to see if it was necessary to conduct Saturday traffic counts in the vicinity of Stonestown. A summary of that incremental impact is as follows:

Peak hourly trip generation rate is:

Trips/1,000 square feet inbound	2.30
Trips/1,000 square feet outbound	2.35

Expansion trip generation is:

138,000 square feet x 2.30 trips/1,000 square feet = 317 vph inbound
 138,000 square feet x 2.35 trips/1,000 square feet = 324 vph outbound

Heaviest incremental traffic impact would be eastbound on Winston Drive, west of Buckingham Way. Two eastbound travel lanes are provided, and, therefore, the impact on eastbound volume/capacity ratio would be:

$$\frac{88}{2 \text{ lanes}} = 0.028 \text{ addition to the volume/capacity ratio}$$

1,600 vph lane capacity

The above analysis indicates that even in the heaviest Saturday hour and on the heaviest Stonestown approach, the new traffic resulting from the expansion would not impact the volume/capacity ratio enough to indicate any effect on intersection operation.

Therefore, Saturday counts are not necessary as a part of this project analysis.

APPENDIX C -- TRANSPORTATION
TABLE C-3
PLANNING CODE PARKING REQUIREMENTS ^{a/}

<u>Land Use</u>	<u>Requirement</u>	<u>Existing Conditions</u>		<u>Proposed Project</u>	
		<u>Size</u>	<u>Spaces</u>	<u>Size</u>	<u>Spaces</u>
<u>Retail</u>	1/500 SF				
Mall Shops	occupied	153,478		304,890	
Emporium	area to	187,801		187,801	
Former Bullock's	20,000 SF	96,310		96,310	
Former J. Magnin's	plus 1/250	23,021		23,021	
Grocery Market Building	SF over	51,740		51,740	
Medical Building Retail	20,000 SF	8,103		8,103	
New Department Store		-		97,500	
Total Occupied Square Feet		<u>520,453</u>		<u>769,365</u>	
Total Retail Spaces:			<u>2,042</u>		<u>3,038</u>
<u>Medical</u>	1/300 SF				
Total Occupied Square Feet:		<u>24,276</u>		<u>24,276</u>	
Total Medical Spaces:			<u>81</u>		<u>81</u>
<u>Business Office</u>	1/500 SF				
Imperial S&L		2,535	5	2,535	5
Administration Building S&L		2,207	4	2,207	4
Stoneson Offices		4,801	10	4,801	10
Medical Building Wells Fargo		3,968	8	3,968	8
Total Occupied Square Feet:		<u>13,511</u>		<u>13,511</u>	
Total Business Office Spaces:			<u>27</u>		<u>27</u>
<u>Service, Repair, or Wholesale</u>	1/1000 SF				
Standard Oil		780	1	780	1
Grand Auto		2,347	2	2,347	2
Cadillac Showroom		3,056	3	3,056	3
Cadillac Service		38,331	39	38,331	39
Total Occupied Square Feet:		<u>44,514</u>		<u>44,514</u>	
Total Service Spaces:			<u>45</u>		<u>45</u>
<u>Theater</u>	1/8 seats				
Total Number of Seats:		<u>904</u>		<u>904</u>	
Total Theater Spaces:			<u>113</u>		<u>113</u>
<u>TOTAL REQUIRED SPACES</u>			<u>2,308</u>		<u>3,304</u>

Source: Barton-Aschman Associates, Inc., August 2, 1985.

^{a/} Spaces/Square Feet of Occupied Area. San Francisco Planning Code, Section 150.

APPENDIX D -- AIR QUALITY
AIR QUALITY ASSUMPTIONS AND METHODOLOGY

Caline-3 Model and Assumptions

Normalized concentrations generated by the Caline-3 model were adjusted for the appropriate emission factor (a function of average speed) and hourly traffic volume.¹ The Caline-3 model ² is a third-generation line source air quality model that is based on the Gaussian diffusion equation and employs a mixing zone concept to characterize pollutant dispersion over the roadway. Given source strength, meteorology, site geometry and site characteristics, the model predicts pollutant concentrations for receptors located within 150 meters of the roadway.

The following variables were specified as worst-case conditions for the roadway segment analysis:

- windspeed: 1 mps for 1-hour, 2 mps for 8-hour
- wind direction: 22-1/2° to road with greatest traffic
- atmospheric stability: Pasquill F
- mixing height: 100 meters
- receptor location: curbside
- traffic volumes: 1-hour volume of 10% of ADT
 8-hour volume of 55% ADT
- background levels: 6.0 ppm for the 1-hour period
 3.0 ppm for the 8-hour period

Emission factors for various vehicle speeds were provided by the California Air Resources Board using the EMFAC-6c computer model. For the local-scale carbon monoxide analysis the following assumptions were made:

-
- ¹ Ranzieri, A., & E. J. Mulberg, Estimating Carbon Monoxide Concentrations for Hot Spots Analysis, CARB, May 1980.
- ² California Department of Transportation, CALINE-3: A Versatile Dispersion Model for Predicting Air Pollutant Levels near Highways and Arterial Streets. Report No. PHWA/CA/TL-79/23, November 1979.

Ambient temperature: 35°F.

Vehicle Mix: 73.8% light-duty auto
16.3% light-duty truck
1.7% medium-duty truck
3.5% heavy-duty gas truck
3.7% heavy-duty diesel truck
1.0% motorcycle

Operation: 50% cold start
10% hot start
40% stabilized

Speed was assumed to be 15 mph.

APPENDIX E -- NOISE
FUNDAMENTAL CONCEPTS OF ENVIRONMENTAL NOISE

This section provides background information to aid in understanding the technical aspects of this report.

Three dimensions of environmental noise are important in determining subjective response. These are:

- a. the intensity or level of the sound;
- b. the frequency spectrum of the sound;
- c. the time-varying character of the sound.

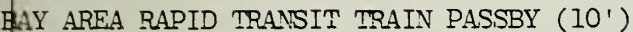
Airborne sound is a rapid fluctuation of air pressure above and below atmospheric pressure. Sound levels are usually measured and expressed in decibels (dB), with 0 dB corresponding roughly to the threshold of hearing.

The "frequency" of a sound refers to the number of complete pressure fluctuations per second in the sound. The unit of measurement is the cycle per second (cps) or Hertz (Hz). Most of the sounds which we hear in the environment do not consist of a single frequency, but of a broad band of frequencies, differing in level. The quantitative expression of the frequency and level content of a sound is its sound spectrum. A sound spectrum for engineering purposes is typically described in terms of octave bands which separate the audible frequency range (for human beings, from about 20 to 20,000 Hz) into ten segments.

Many rating methods have been devised to permit comparisons of sounds having quite different spectra. Fortunately, the simplest method correlates with human response practically as well as the more complex methods. This method consists of evaluating all of the frequencies of a sound in accordance with a weighting that progressively and severely deemphasizes the importance of frequency components below 1000 Hz, with the fact that human hearing is less sensitive at low frequencies and extreme high frequencies than in the frequency midrange.

The weighting curve described above is called "A" weighting, and the level so measured is called the "A-weighted sound level", or simply "A-level".

A-WEIGHTED SOUND
PRESSURE LEVEL,
IN DECIBELS



(100') = DISTANCE IN FEET
BETWEEN SOURCE
AND LISTENER

FIGURE B-1: TYPICAL SOUND LEVELS MEASURED IN THE ENVIRONMENT AND INDUSTRY

The A-level in decibels is expressed "dBA"; the appended letter "A" is a reminder of the particular kind of weighting used for the measurement. In practice, the A-level of a sound source is conveniently measured using a sound level meter that includes an electrical filter corresponding to the A-weighting curve. All U.S. and international standard sound level meters include such a filter. Typical A-levels measured in the environment and in industry are shown in Figure B-1.

Although the A-level may adequately describe environmental noise at any instant in time, the fact is that the community noise level varies continuously. Most environmental noise includes a conglomeration of distant noise sources which creates a relatively steady background noise in which no particular source is identifiable. These distant sources may include traffic, wind in trees, industrial activities, etc. These noise sources are relatively constant from moment to moment, but vary slowly from hour to hour as natural forces change or as human activity follows its daily cycle. Superimposed on this slowly varying background is a succession of identifiable noisy events of brief duration. These may include nearby activities or single vehicle passages, aircraft flyovers, etc., which cause the environmental noise level to vary from instant to instant.

To describe the time-varying character of environmental noise, the statistical noise descriptors L10, L50, and L90 are commonly used. The L10 is the A-weighted sound level equaled or exceeded during 10 percent of a stated time period. The L50 represents the median sound level. The L90 is the A-weighted sound level equaled or exceeded during 90 percent of a stated time period. The L90 is used to describe the background noise.

As it is often cumbersome to describe the noise environment with these statistical descriptors, a single number descriptor called the Leq is also widely used. The Leq is defined as the equivalent steady-state sound level which in a stated period of time would contain the same acoustic energy as the time-varying sound level during the same time period. The Leq is particularly useful in describing the subjective change in an environment where the source of noise remains the same but there is change in the level of activity. Widening roads and/or increasing traffic are example of this kind of situation.

In determining the daily measure of environmental noise, it is important to account for the difference in response of people to daytime and nighttime noises.

During the nighttime, exterior background noises are generally lower than the daytime levels. However most household noise also decreases at night and exterior noises become very noticeable. Further most people are sleeping at night and are very sensitive to noise intrusion.

To account for human sensitivity to nighttime noise levels a descriptor, Ldn, (day-night equivalent sound level) was developed. The Ldn divides the 24-hour day into the daytime of 7 am to 10 pm and the nighttime of 10 pm to 7 am. The nighttime noise level is weighted 10 dB higher than the daytime noise level. The Ldn, then, is the A-weighted average sound level in decibels during a 24-hour period with 10 dBA added to the hourly Leqs during the nighttime. For highway noise environments the Leq during the peak traffic hour is approximately equal to the Ldn.

The effects of noise on people can be listed in three general categories:

- 1) subjective effects of annoyance, nuisance, dissatisfaction;
- 2) interference with activities such as speech, sleep, learning;
- 3) physiological effects such as startle, hearing loss.

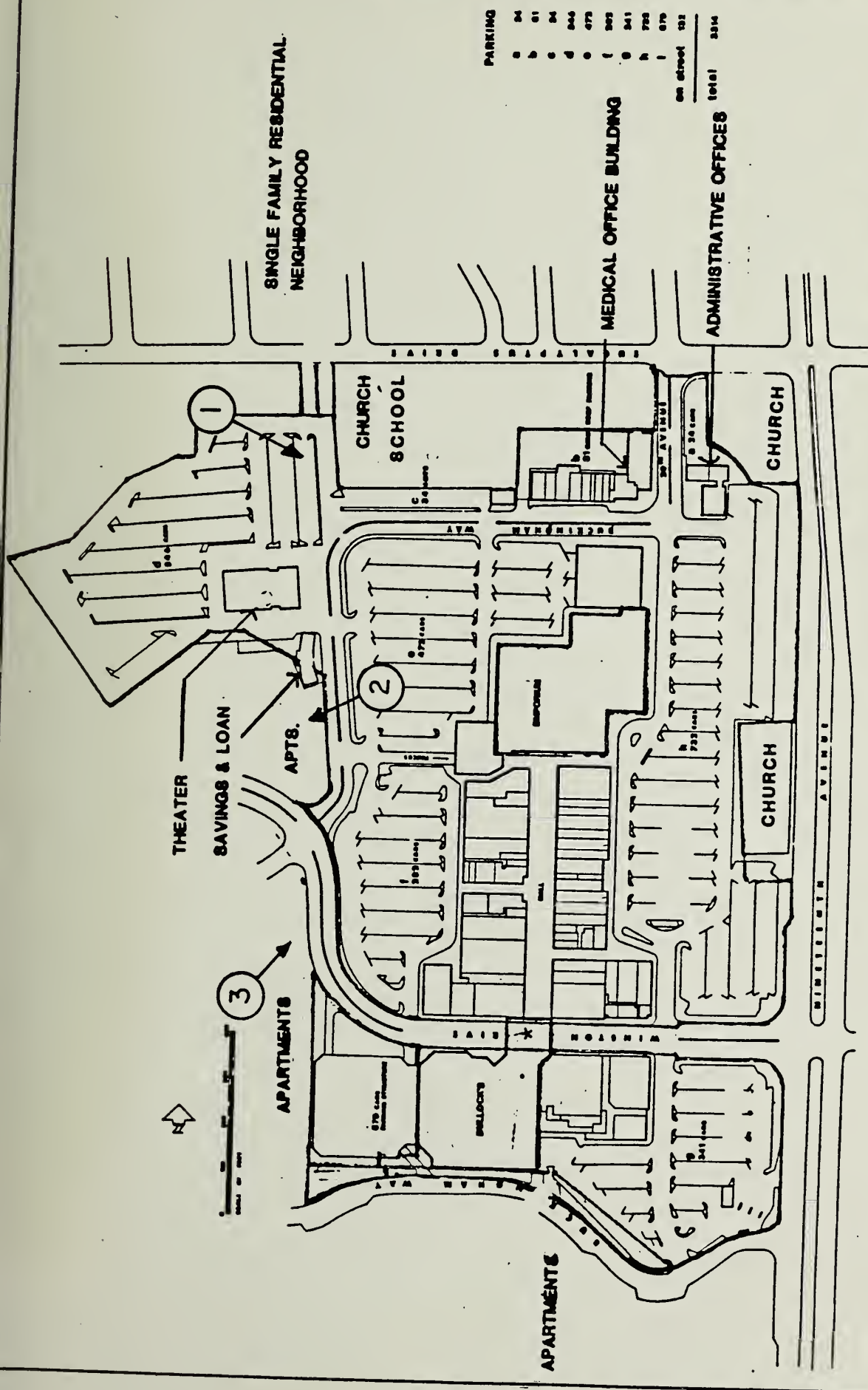
The sound levels associated with environmental noise, in almost every case, produce effects only in the first two categories. Unfortunately, there is as yet no completely satisfactory measure of the subjective effects of noise, or of the corresponding reactions of annoyance and dissatisfaction. This is primarily because of the wide variation in individual thresholds of annoyance, and habituation to noise over differing individual past experiences with noise.

Thus, an important parameter in determining a person's subjective reaction to a new noise is the existing noise environment to which one has adapted: the so-called "ambient" noise. "Ambient" is defined as the "the all-encompassing noise associated with a given environment, being a composite of sounds from many sources, near and far". In general, the more a new noise exceeds the previously existing ambient, the less acceptable the new noise will be judged by the hearers.

With regard to increases in noise level, knowledge of the following relationships will be helpful in understanding the quantitative sections of this report:

- a) Except in carefully controlled laboratory experiments, a change of only 1 dBA cannot be perceived.

- b) Outside of the laboratory, a 3-dBA change is considered a just-noticeable difference.
- c) A change in level of at least 5 dBA is required before any noticeable change in community response would be expected.
- d) A 10-dBA change is subjectively heard as approximately a doubling in loudness, and would almost certainly cause an adverse change in community response.



EXISTING SITE

STONESTOWN

NOISE MEASUREMENT LOCATIONS

Source: Charles M. Salter Associates, Inc.

Figure E-1

